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## ABSTRACT

Funds made available through the Federal Model Cities Program allowed Denver to develop a conceptual plan for occupational exploration and education. Data needed for this project were collected through an inventory of school programs and industrial training programs and from the Emily Carriffith Opportunity School. Additional data pertaining to population and manpower needs of Denver were also gathered to provide the foundation of the conceptual plan. Major recommendations of the study include: (1) Provisions for innovation, development, and change should be incorporated as part of the operational philosophy of the public schools, (2) Community groups should be involved in providing direction in the public schools, (3) Continuing evaluation of school programs is most important, (4) Each high school should be as comprehensive as the student population may justify, and (5) The program of guidance services should include increased vocational guidance. (JS)

ED0 42000

**DENVER PUBLIC SCHOOLS**  
**MODEL CITIES SURVEY**

**A COMPREHENSIVE  
PROGRAM OF OCCUPATIONAL EXPLORATION  
AND VOCATIONAL EDUCATION  
A CONCEPTUAL PLAN**

ECONOMIC DEVELOPMENT ADMINISTRATION

**T**ECHNICAL  
**A**SSISTANCE  
**P**ROJECT

U.S. DEPARTMENT OF COMMERCE

**CITY AND COUNTY OF DENVER**

*and*

**DENVER PUBLIC SCHOOLS**

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Denver Public Schools

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## SUMMARY OF RECOMMENDATIONS FOR IMPLEMENTING THE CONCEPTUAL PLAN

### Introduction to Recommendations

In the following chapters of this report the needs for educational offerings in the Denver community have been documented. In addition, a rationale for the offering of educational programs within the several types of institutions within the community has been presented. Based upon this review of the complex educational needs for Denver and the surrounding community, the following summary of recommendations is made.

Provisions for innovation, development, and change should be incorporated as part of the operational philosophy of Denver Public Schools and encouragement given to these practices by individual schools and faculty members.

A significant effort must be made toward in-service development of staff members responsible for vocational education and should become an on-going process.

Close coordination with programs being developed by other educational institutions within the area must be maintained in order to provide the highest quality comprehensive educational program in an efficient manner and to avoid duplication of effort.

Involvement of community groups should be established to help provide direction in the public schools. They should be closely coordinated with, and overlap, the committees existing for other educational institutions such as the Emily Griffith Opportunity School.

A systematic process of establishing educational objectives should be incorporated into the reorganized program of the Denver Public Schools.



A continuing evaluation of the total program and in each of the areas should be instituted which is based on objectives previously established.

As a student proceeds through the elementary, junior high school, and senior high school programs, he should be given the opportunity of exploring occupations at a general level, the development of pre-vocational knowledges and skills, and ultimately the development of entry level occupational competence.

The program of guidance services offered in the Denver Public Schools should include increased vocational guidance as well as guidance for higher education.

Practical arts offerings in the junior high schools should be carefully articulated with those in the senior high schools to insure a meaningful flow of experiences for the students.

Part-time cooperative education programs should be expanded. Programs of this type are seen as having great potential for meeting the needs of many of the students in the poverty areas of Denver.

An integral part of the Denver Public School system should be arrangements for initial job placement of students terminating their education at the twelfth grade.

Direction at the city-wide planning level should be provided to insure that individual schools have the best programs, equipment, and facilities to provide comprehensive educational programs. These programs should be consistent with student needs and across schools within the City of Denver.

The existing programs in home economics, business education, and industrial arts should be reorganized to reflect major changes in technological developments, employment opportunities, and more recent thinking by educators and leaders in each of these areas.

Programs, space, and facilities must be updated to meet the needs of students in the Denver Public Schools; specific decisions regarding such facilities will of necessity be dependent upon the implementation of a conceptual plan.

The programs in general business education, home economics, and industrial arts should have vocational as well as prevocational and general education objectives.

Each high school should become as comprehensive as the student population may justify. None are now offering a comprehensive program.

A specialized area type of secondary facility needs to be established to serve the specialized program needs of students on a city-wide basis.

Careful planning among the several institutions and agencies providing occupational, adult, and post-high-school education should be developed to insure the full utilization of the extensive facilities and equipment needed for these types of education.

A comprehensive re-evaluation of the basic role of the Emily Griffith Opportunity School should be made in light of the total educational developments in the Denver Metropolitan Area.

The principle of operating cooperatively with adjacent counties should be continued and extended in view of the success with which this program has met.

Policies and regulations governing teachers in similar programs but at different levels should be the same. For example, teachers of vocational programs in the high school should be governed by similar regulations to those in the Emily Griffith School.

A reorganization of the administration for practical arts, vocational, technical, and adult education within the Denver Public Schools must be undertaken. This can only be effected, however, if the administrative structure of the entire Denver School system is considered.

Programs for adult occupational preparation should be located in areas convenient to the prospective students. A centralized location for occupational and adult programs is not likely to reach those persons most in need of services. An action program will be required.

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## **CHAPTER I**

### **INTRODUCTION AND APPROACH**

#### **Introduction**

Opportunity for the present Survey and Report developed as a result of the City and County of Denver being designated as one of the Model Cities under the Federal Model Cities Program. Financial assistance was received through the Economic Development Administration, U. S. Department of Commerce, Technical Assistance program. A provision for developing programs for occupational competency and vocational education was included as one segment of the original overall Model City plan. Specific planning and arrangements for this Survey were carried-out through representatives of the City and County of Denver and the Denver Public Schools.

This close working relationship is a recognition of the public school's inherent role in the educational programs for both in-school youth and the out-of-school youth and adults. The Denver Public Schools have a major recognized role in providing a part of the required and desirable educational programs for the population of the City. Several factors have emerged in recent months to focus on the role of the Denver Public Schools. They include: 1) employment of a new Superintendent of Schools and other administrative personnel who are engaged in a re-evaluation of the needs and directions of the school system; 2) increased funding from various State and Federal sources focused on specialized needs; 3) initiation of a master plan for community colleges in the State of Colorado and the establishment of the Denver Community College; and, 4) an emerging focus on the needs of and programs for minority and other specialized groups.

The inadequacy of existing school facilities for both the regular school program and the adult program was recognized some time ago. A major bond issue for expansion of facilities was developed. Failure of the public to support the bond issue in September 1967 allowed this need to increase. Overall need of additional facilities for the regular programs is well documented.

Specific actions and direction for meeting these needs with additional facilities will have to be faced in the relatively immediate future. A comprehensive program of occupational exploration and vocational education should have attention as a part of the re-evaluation and development of additional facilities so that facilities can be modified and expanded to meet the requirements of the programs to be offered.

Development of such a program is composed of three developmental phases. Phase I requires the development of an overall conceptual plan at a relatively general level. Phase II consists of planning activities where the overall plan receives more detailed attention relative to the programs to be offered and the facilities for supporting the programs including evaluation for remodeling and constructing new facilities or the re-allocation of existing facilities. A major program of in-service development activities and training will be necessary during this Phase. Since the present staff will carry a major role in implementing changes, it is necessary that they be a part of developing the objectives and operating program guidelines. In-service planning with the administrative group at the central administration and local school level will also be required. Phase III will actually overlap a part of Phase II and will be concerned primarily with implementing the overall plan by establishing the operating programs for students.

A primary consideration in developing and carrying-out Phase I, as reported herein, was the very short time for conducting and reporting the Survey within budgetary limitations of the Federal funding procedures. This limitation determined that a major part of all consideration must be based on available data and judgments of persons familiar with the situation. In-progress studies were of major value as data became available from the Economic Development Administration-Denver Study interim reports. A preliminary review of these studies and reports indicated that Denver was most fortunate in having available several high quality studies concerned with the population, labor force, economic status, and educational programs. Additional data were also available from the records and reports of the Denver Public Schools and other agencies.

The collection of original data for this Survey was limited to conducting an inventory of occupational training presently available within the public schools, a sampling of other training being offered within business and industry

of the community and offerings by the private and preparatory schools. Additional data to provide a more precise identification of the participants in programs at the Emily Griffith Opportunity School was also gathered. Each of the areas of additional data collection are discussed later in this report. More detailed information is presented in Appendices A through C. The in-process study by Professor Reuben Zubrow focused on the Target Areas and the adjoining "poverty areas" of the City also provided reference data for this Plan.

Detailed review of data and findings of the other available studies will not be repeated nor reported herein. However, they have been reviewed and analyzed for purposes of making the recommendations and guidelines within the conceptual plan. They will be of increased value in more detailed analysis and development of the actual programs and offerings in Phase II.

### Objectives and Rationale

The central objective of the present Survey was to develop a conceptual plan for providing a coordinated program of pre-vocational education, occupational exploration and vocational education within the City of Denver. Particular focus was devoted to the Denver Public Schools and their present programs and potential for carrying-out programs on a continuing basis. Other public and private institutions and agencies concerned with education and related activities are an integral and indispensable part of a total program.

However, the public schools as the recognized agent charged directly with the responsibility of education from kindergarten through the twelfth grade must carry-out its activities for a significant proportion of the total population on a continuing basis. In the areas of out-of-school youth, adult education, and post-high school programs of both a formal and informal nature, responsibilities are shared and must be coordinated among all responsible agencies. It is in the latter areas where joint and cooperative planning and resources must be utilized to reach all segments of the community. Meaningful joint and coordinated planning can yield programs which are effective, efficient, and economical. Lack of planning very often results in duplication, competitive programs, significant gaps in services, economic waste and confusion in the community and among those in need of services. This latter situation exists, to a degree, in Denver at present.



A complete program must provide opportunities for the youth and adults to participate in meaningful occupational exploration and choice, pre-employment occupational preparation to job-entry level competencies, in-service training for upgrading and promotion, both pre- and in-service retraining as the nature of the labor force and occupational requirements change, guidance and employment counseling, basic and general education for beginning and improved educational skills, becoming a more effective family member and homemaker, and cultural and avocational pursuits as a part of a full and worthwhile life. A basic assumption and requirement for all occupationally oriented education is that it must be an integral part of a comprehensive and complete educational system. There should be no conflict between general or basic education and vocational education. Each is an indispensable and inseparable component in the preparation of successful citizens and workers at all levels, regardless of whether the preparation for a chosen occupation is gained as a part of the high school, junior college, adult or college offerings.

Occupational exploration and vocational education at the professional level has been provided in colleges and universities and is well accepted and supported by both public and private funds. Major efforts in the public school curricula and guidance services are devoted to entering colleges and universities for the baccalaureate degree and occupational preparation appropriate for this degree. The principle of public support of occupational preparation at the baccalaureate and college level is well accepted through support of colleges and universities. However, the same basic principle has not been applied to occupational preparation at less than the baccalaureate degree. There is an increasing recognition that if the principle is sound that it is equally sound for all occupational levels. The present best estimate is that seventeen to nineteen out of each one-hundred Colorado youths will in fact complete a baccalaureate program. Since the high school drop-out rate is higher, the ratio for the City of Denver may very likely be lower than this general index. However, the present secondary curriculum is geared primarily to the "college prep" type of curriculum.

The only organized and sequenced program in the secondary schools is oriented to college entrance. All students must either follow the college preparatory curriculum or choose various combinations of courses and experiences to meet graduation requirements. Such selections must be accomplished by the individual students without benefit of a recognized program providing



sequence, purpose and ultimate objectives. Occupational preparation to entry level competency has not been seen as one of the purposes and roles of the secondary school. Consequently, the majority of the age group reach eighteen years of age and initial occupational placement without benefit of an organized program.

The Emily Griffith Opportunity School has played a major role in occupational preparation and upgrading activities for many years. However, no adult education program, regardless of quality or extent, can replace the need for occupational preparation programs at the secondary level. At best it can provide a supplemental, extension, and remedial program for the community.

Un-employment and under-employment is most often directly related to "employability," of which general and vocational education are major elements. Gaining employability for each individual through appropriate educational programs must become a systematic process starting early in the elementary grades. Traditionally, those who need the most help have had programs less appropriate to their needs, and such programs are less available to them. Those with lesser ability, lower economic level, and restricted contact with their community and opportunities more often find it difficult to adjust to the programs and requirements of our traditional school programs. A large part of the adult population is composed of those who have left school and now find themselves at a reduced employment level without the background to enter and/or advance in an occupation.

For the adult citizen who have left or completed school with inadequate, general or basic education and a saleable occupational competency, a "curative" or occupational rehabilitational program is essential. General and basic education components of such programs located at a central or limited locations will not reach those most in need of services. A program whereby the offerings for adults is an active "change agent" must be developed to contact and attract potential participants and offer a program under conditions to meet the needs of the individuals. The total social and economic level of the community is the cumulative result of the social, occupational competency and success of each of its citizens and groups.

Equally, if not more, important in the long range is a "preventative" program for the in-school youth; a program that will retain all youth in an appropriate and quality education program until they have attained at least

an entry level occupational competency. For many, this means junior college or college completion. But today in Denver, the majority of the youths have their last contact with an organized educational program during or at the completion of high school. Consequently, a significant and comprehensive occupational preparation program must be available to each high school student prior to his dropping out or graduation. It would seem realistic, and possible, to substantially reduce the current drop-out rate in Denver Public Schools and provide employability for a large group of youth who are annually joining the pool of adults needing curative programs. The ultimate goal of a minimum of high school completion or graduation for all youth may not be reached in the near future, but a significant move toward this goal can be achieved.

#### **Primary Focus of The Survey**

The primary focus and emphasis of the Model Cities program and the Economic Development Administration was on the designated Target Areas in the City. However, these Target Areas are an integral part of the economic and social community which is composed of the City of Denver, the surrounding Metropolitan Area, and the State of Colorado. Comprehensive program planning must be conducted in cooperation with the agencies and groups concerned at each level. Results of prior studies have shown a population and labor force mobility pattern which would indicate occupational competency and educational level to be primary factors in the movement out of and into the Target Areas. A large part of the recent population growth in the Target Areas has been due to in-migration from other parts of the City, Metropolitan Area, and from beyond the immediate region. The indigenous population of these Areas, and those areas immediately adjacent, have the highest unemployment rate, lowest educational level, and lowest family income level in the City or Area. In addition, these Areas show the highest drop-out rate from the high schools, exceeding 60% in some cases. This combination of factors has resulted in a significant pool of youth and adults who are in need of remedial and curative programs of both general and vocational education on a short-term and long-term basis.

A major assumption was that a comprehensive and coordinated program of general education, occupational exploration and guidance, and vocational education for youth and adults will make a major contribution to the economic level of the City and Area by reducing the unemployment and underemployment levels.

In addition, such a program in the public schools will serve as a preventative measure in reducing the flow of drop-outs and others into the areas. Involvement of the public groups in the planning and developing of such programs will improve the relationships of the citizens in the areas and gain their involvement and participation in a total program. Coordinated planning will involve not only the Denver Public School's programs, but all other agencies and groups to gain the maximum services for all segments of the population.

The first step in establishing a "Conceptual Plan" was to review available data and obtain limited additional data which provided a basis for establishing the present status and, therefore, a basis for future planning. Five types of activities were conducted in establishing the present status. They were:

1. Population and demographic data as provided from the Bureau of the Census Reports, Current EDA sponsored Studies, Mountain States Telephone Company, Denver Chamber of Commerce, CAMPS Reports, and the Colorado Master Plan for Community Colleges and Occupational Education, and other sources were reviewed as a base for establishing the current and projected trends in occupational, population, and educational needs. No new data were collected in this area.
2. A review of the labor force and trends as reflected in the above studies and, in particular, the on-going study by Professor Reuben Zubrow financed by the Economic Development Administration provided current comprehensive data.
3. An inventory of the present public school programs in pre-vocational and vocational education as well as the training conducted by private and proprietary schools and at the Emily Griffith Opportunity school were reviewed to establish an estimate of the extent and compatibility of on-going program in light of population and labor force needs.

- 3.1. An inventory of enrollments and offerings in the practical arts and vocational areas at each of the public senior high schools within Denver was developed to establish their potential for utilization of present facilities for new or revised programs.
- 3.2. Interviews and a sampling of in-industry training activities within the City of Denver were conducted to establish the type and level of program offerings.
- 3.3. Interviews and a sampling of enrollments and offerings by the private and proprietary schools to establish another element in the total occupational education picture were conducted.
- 3.4. A more detailed analysis of the persons currently enrolled in classes offered by the Opportunity School was obtained to establish an estimate of the persons being served in light of the potential needs in the City.
4. Interviews and discussions were held with representatives of groups and agencies as well as with individuals who were knowledgeable about the needs, desires, and views concerning vocational education and occupational opportunity for those persons not in the formal school program.
5. The overall design of the Survey for the Conceptual Plan included a dual purpose aspect. A team of consultants representing various educational specialities and backgrounds were engaged to visit the Denver Public Schools. Each individual or pair of consultants was charged with the responsibility of meeting with the supervisory and teaching staff in their respective fields, visiting selected classroom activities and reviewing the current and projected programs. In addition to developing a report of their discussions and visitations containing an analysis of the present situation and recommendations for future development, they met

with selected groups, usually the curriculum development committee, to assist in exploring program revisions and potential for future developments. The latter aspects were for the purpose of assisting with the in-service development program. It is anticipated that the consultants will be able to work with the Denver Public School Personnel on a continuing basis in the re-evaluation, development, and implementing activities.

#### The Consultant Team

Two considerations were foremost in the development of the consultant team to work on the current Survey. The first was to obtain the services and competencies of individuals who were recognized as being knowledgeable within their particular specialty and with concerns and experiences in working across the several areas. Secondly, individuals were selected who could assist with an evaluation of current and projected programs, who would have an interest in continuing a longer term relationship and who could provide assistance to personnel in the Denver Public Schools as these programs develop from planning to implementation. In general, the principle of pairing an out-of-state consultant with a representative from within Colorado was followed. Individuals from Colorado will be relatively more available on a continuing basis during the later developmental stages. Several were familiar with personnel and programs within the City of Denver, and, therefore, could take maximum advantage of prior experience.

Each consultant, or pair of consultants, visited the Denver Public Schools on a pre-arranged schedule. All visits were made during May and early June. Typically, the individual consultant, or team of consultants, met with administrative and supervisory personnel and then visited a number of the schools for discussions with individual teachers, principals, and others. A group meeting with the curriculum committee or other representatives of the specialty field was then held to discuss the present programs, needs, and possible future developments. Following the visits each consultant or team prepared a report



of their visit. General observations from the visits and recommendations for future program development were submitted. Complete copies of the observations and recommendations as submitted by the consultants are included in Supplemental I of the Interim Report.

The second aspect of the role of the consultants was in assistance with the development of newer programs and was initiated during their original visits. Additional discussions, correspondence, and exchange of ideas and materials between the consultants and Denver Public School personnel have been underway. One of the consultants, under a separate arrangement with the Denver Public Schools, has returned to conduct an in-service training conference for persons selected to be coordinators of the new part-time cooperative education programs to be initiated in the fall of 1968. Other arrangements are being made whereby selected classes in the Denver Public Schools will be a part of a curriculum development and demonstration project initiated by Dr. Elizabeth Simpson, Consultant in the Home Economics Area.

Preliminary indications from reactions of the supervisory and teaching staff of the Denver Public Schools and the individual consultants, indicate that this aspect of the Survey has been quite effective and helpful in initiating program planning and change. A major gain has been in the attitude and acceptance of the Denver Public School personnel. A demonstration of interest in program development and the activities of the individual teachers through contact with the individual consultants has resulted in an increased enthusiasm and interest in program re-evaluation and development.

Although the consultant team did not meet as a group until a preliminary reporting session late in June, the evaluations and recommendations of each of the members and teams showed a high degree of commonality in several areas. Their reports and discussions were utilized throughout this Report and especially in making recommendations. Very briefly, the areas of common agreement across most, if not all, consultants included:

1. The existing programs in Home Economics, Business Education, and Industrial Arts are highly traditional and do not reflect major change in light of technological developments and employment opportunities.

They appear to be the result of programs established quite a number of years in the past and continued without overall evaluation of primary purpose. Each of the areas operates on a relatively independent basis.

2. The value and desirability of General Business Education, Home Economics, and Industrial Arts as a part of the general education program in the junior and senior high schools is well recognized and supported. They have, and should have, objectives other than pre-vocational and vocational education.

However, the present offerings do not appear to be a part of a comprehensive and coordinated program with a well identified objective or objectives.

3. A complete, or adequate, program must include: a) guidance services, including vocational guidance as an integral component, b) exploration of the world of work, c) vocational education; and, d) initial job placement arrangements.

Many programs and services are inadequate and almost non-existent in most of the high schools.

4. A number of teachers in each of the areas at the various high schools recognize the need for a revised and different kind of program to meet the needs of the students. Many are desirous of being a part of the development of more appropriate programs.
5. There is scattered evidence of attempts to revise current programs in light of student needs and for occupational preparation. The most notable examples are in those locations where a Butler Building has been established under the elementary and secondary funding provisions.
6. There was unanimous agreement that the program developed through the Metro Youth Center is truly an outstanding program and deserving of recognition, support, and possible expansion to other locations.



7. There is an almost complete lack of part-time cooperative educational programs in the high schools. Such programs have been significantly expanded throughout the nation and have been found to be most effective.
8. Guidance services, particularly for the non-college bound, appeared to be inadequate and inappropriately structured for service to these individuals. Vocational guidance and exploration of the world of work was inadequate in the existing "vocation" class.
9. Space and facilities are generally inadequate and very often inappropriate for the initiation of major changes in existing programs or to initiate a significant level of occupationally oriented programs.

Equipment is generally inadequate for use in occupational preparation. It is neither sufficiently comprehensive nor representative of the newer and currently used equipment in business and industry.

10. The existing administrative and supervisory structure leaves much to be desired. A major change in approach will be required to gain effective support and coordination in program development.

Two particular points commonly cited by the consultants were the current system of department heads within the teaching areas at the high schools and the lack of coordination between the secondary schools and the Emily Griffith Opportunity School.

11. A comprehensive re-evaluation of current programs and identification of a new coordinated direction will have to be developed to meet present needs and to provide a base for systematic program planning. Internal planning, widespread involvement, and a significant in-service development and educational program will be necessary in initiating and accomplishing any new direction.

## CHAPTER II

### POPULATION AND LABOR FORCE

#### Overview of Colorado

For each of the two-year periods 1950 to 1966, with the exception of 1964-65, Colorado has enjoyed an annual rate of population increase in excess of that for the total United States (CAMPS I - 31). For each two-year period with the exception of 1963-64, this increase has been accounted for in part by immigration. In the 1965-66 period, the total increase in population of 53,000 people consisted of 18,000 as a result of natural rate of increase and 35,000 as a result of immigration (CAMPS I - 30). The percentage of unemployment for the period 1961 through 1967 has been consistently lower in Colorado than for the whole United States (CAMPS I - 34). While these figures appear reassuring on the surface, Colorado is not without major problems.

In summarizing the manpower needs for the State of Colorado, the CAMPS report makes the following observations: first, the State of Colorado has significant minority groups. Of the total population of two million, approximately 250,000 are members of minority groups. These are distributed as follows: 180,000 Spanish-American, 60,000 Negroes, 3,500 Orientals, and 4,300 Indians. Second, educational deficiency is a major problem of these minority groups. Of the State's total population, approximately 48% of those who are 25 years of age and over lack a high school diploma. Third, 90,000 families, or 18.3% of the total population, have an annual income below the poverty guide line of \$3,000.

In summarizing the resources available to Colorado to deal with some of their manpower problems, vocational education is given major emphasis. The present enrollment in vocational programs throughout the State is 86,000. A need for such training is estimated at 160,000. The obvious conclusion is that over 70,000 students will not be offered vocational training who should be. Other resources for meeting the manpower needs in Colorado are discussed in the CAMPS report, specifically MDTA, adult basic education, community action programs, neighborhood youth corps, etc. While these programs are

filling an important need at present they are primarily of a remedial nature and very often short-term and transitory. The need for such programs would be reduced significantly if adequate vocational training were provided in the high schools.

#### Denver

That the problems discussed above for the State of Colorado are more acute in the City and County of Denver is attested to by the following. Denver is in the center of the Bureau of Census Standard Metropolitan Statistical Area (SMSA). In 1966 the five county area had a population of slightly over one million. Of this total 505,000, or a little over 50% lived in the City of Denver. The population density of Denver County in 1960 was approximately 7,500 persons per square mile compared to a maximum of 162 persons per square mile for other counties in the SMSA (CAMPS, 1-126 through 11-1).

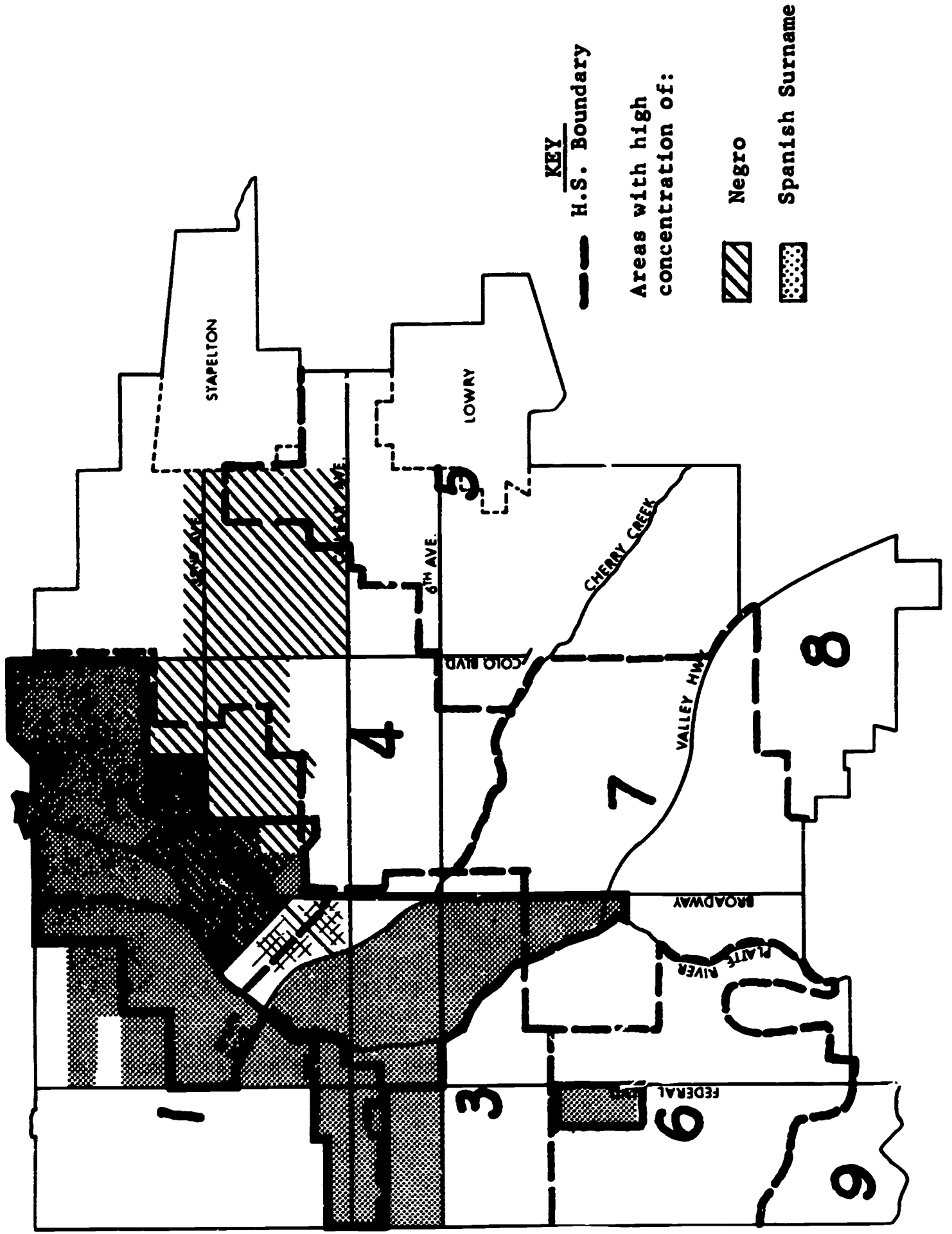
The average annual rate of population increase for Denver County for 1965-1970 is estimated to be only one percent, lower than any of the other five counties in the Metropolitan Area. Since this percentage is computed on a population base of 505,000 for Denver County, well over twice the base for other counties in the Metropolitan Area, it alone presents an incomplete picture of the change in Denver. The actual increase in population from 1965 to 1967 was 27,000 people, exceeded only by Jefferson County (45,000) and Adams County (39,000). It is obvious, therefore, that while the rate of growth in Denver is relatively low the absolute increase in population over the five-year period mentioned is quite substantial (Telephone Study, Tables I and II).

According to the 1960 census, there were 30,251 Negroes residing in Denver, accounting for 6.1% of the total population. Estimates for 1966 range from 38,000 to 42,000, or approximately 8% of the population. The Denver Planning Office estimates that by 1980 the Negro population will be between 60,000 and 70,000 persons.

Of the Negroes living in Denver in 1960, 85% were concentrated within the nine census tracts represented by the cross-hatched area on Chart No. I. Negroes accounted for from 37% to 85% of the total population within these nine tracts. The nine census tracts include approximately one-half of the Manual High School District and one-third of the East High School District.

# CHART I

## HIGH SCHOOL DISTRICTS AND POVERTY AREA IN RELATION TO POPULATION AND ECONOMIC TRACTS



### HIGH SCHOOL DISTRICTS

1. North
2. Manual
3. West
4. East
5. Washington
6. Lincoln
7. South
8. Jefferson
9. Kennedy

Negro students accounted for 70% of the enrollment of Manual, 31% in East, 4% in West and 3% in Washington High School. The remaining high schools all have a Negro enrollment of less than 1%.

The median school year completed by Negroes 25 years of age and older in the Manual and East High School areas ranged from a low of 8.0 years to a high of 12.2 years. The median age of Negro males was 24.3 years, while white males was 29.0 years.

According to the 1960 census there were 43,174 people of Spanish surname residing in Denver County, comprising approximately 8.7% of the total population. Of these, 72% resided in twenty-one census tracts within the poverty area of the City. This area is represented by the shaded portion of Chart No. 1. People of Spanish surname constitute 57% of the total population of these tracts. These twenty-one census tracts include practically all of the Manual High School District, two-thirds of West High School District, and one-half of North High School District.

The proportion of Spanish surname students in the various high schools are: West 36%; North 32%; Manual 20%; Lincoln 12%; South 10%; and East 5%. The remaining schools have a Spanish surname enrollment of less than 1% (MERI, 108).

The increase in the Spanish surname population between 1950 and 1960 was 73%. Current estimates by various agencies place the increase between 19% and 53% from 1960 and 1967, or a total estimated Spanish surname population of between 52,000 and 64,000.

Chart No. I illustrates vividly the points to be made. For the census tracts contained within the area described by the solid black lines are:

1. The area with the lowest quarter median educational attainment, ranging from 8 to 10 years.
2. Ninety-five percent of the area with the lowest quarter of median family income.
3. One-third of the households within the poverty income group (the median income of this area is approximately \$3,200).
4. Almost the entire area with the highest quarter of unemployment for Denver County. Unemployment ranges from 7% to 16%, increasing to a high of 25% for males under the age of 25 years.
5. Approximately 90% of the area with a high concentration of Spanish



surname people and 20% of the area with a high concentration of Negroes.

6. Approximately 80% of the Manual High School District, 50% of West High School District, and 30% of the North High School District.

It is interesting to note that the area enclosed by the black lines includes almost all the Model Cities Target Area No. 1 and almost the entire area included in the recent study by Dr. Ruben Zubrow. The only area not included is Model Cities Area Target No. 2, known as College View, on South Federal Boulevard.

The most recent data on the distribution of the population within the City of Denver are most revealing. These data, taken from the EDA Study, show a decrease in the population for the poverty area and an increase for the non-poverty area. There was a decrease of 21.2% in the population of the poverty area between 1950 and 1960 and a further decrease of 19.1% from 1960 through 1967. During the corresponding periods the non-poverty area population has shown increases of 44.7 and 14.4%, and the four suburban counties (Adams, Arapahoe, Boulder, and Jefferson) showed increases of 121.9 and 40.1%.

The changing minority group concentrations are clearly indicated by the fact that the white population of the poverty area dropped from 75,400 in 1960 to 42,500 in 1967. During the same period the non-white population dropped from 25,000 to 20,400, while the Spanish surnamed increased from 28,600 to 41,600.

This supports the often-cited position that the Negro population is shifting from the north central portion of the City eastward toward the Park Hill area. At the same time, the poverty area is becoming more densely populated with people of Spanish surname. Furthermore, the Negroes remaining in the poverty area are economically less well off than people of Spanish surname. Within the poverty area the median family income for Negroes is \$2,825 as compared to \$3,500 for the Spanish surnamed. This is the opposite of the City as a whole where Negroes have a median family income of \$5,031 and Spanish surnamed \$4,636 (EDA Denver Study, Part I).

Colorado's annual average increase in new nonagricultural jobs for the 1960-66 period was 3.2% compared to 1.7% for the nation. This has resulted in an average of over 18,000 new nonagricultural jobs being filled each year in the State.

Colorado is expected to show significant expansion in construction, services, trade, finance, insurance, real estate, and government. These increases, as well as a decrease in agriculture, are in keeping with the national trends. It is anticipated that Colorado will show greater growth than the nation as a whole. Mining and transportation are expected to remain essentially stable.

A large proportion of the total employment for the State is in the Denver SMSA for seven of the eight nonagricultural industries. The proportions for these industries are as follows: contract construction, 61.5%; manufacturing, 71.4%; trade, 67.2%; finance, insurance, and real estate, 75.9%; service and miscellaneous, 66.9%; government, 49.0%; and mining, 28.5%. Generalizations about Denver from data available only for the whole State are therefore at least partially justified.

Consideration of projected employment figures for Denver only is quite misleading. It is only realistic to expect the Denver Public Schools to prepare many students who will eventually work in other locations. Ideally, data would be available for Denver, the Denver SMSA and the State of Colorado as a whole in making plans for educational offerings in the Denver schools. Such data are not available. Planning for future educational programs is seriously hampered by this lack of information.

Some information on estimated need for trained workers in the State of Colorado is available, however, and helps to give at least a partial picture of the future. For example, the Colorado Master Plan for Community Colleges and Occupational Education reports an estimated need for 12,665 newly trained workers in the field of Electronics by 1971. Of these, 7,985 would be trained by the schools and 4,680 by the various companies. These jobs range from semi-skilled to highly skilled workers. Similar figures for the machine trades show 11,940 to be school trained and 1,405 to be company trained.

While these figures are not available for the City of Denver and the Denver SMSA, the fact that 59.4% of the State's employment was in the five county Denver SMSA in 1966 strongly suggests that generalizations about Colorado will often be applicable to the Denver SMSA.

The concentration of need in the City of Denver is further emphasized by the fact that in 1962, 43 of the 59 industrial plants in Colorado employing 500 or more persons were located in the City of Denver proper with seven others in the Metropolitan Area.



A recent study conducted by Dr. Zubrow, financed by the Economic Development Administration gives the following projections for employment for 1967 to 1975:

1. Proportion of unskilled jobs in manufacturing is falling, whereas in trades, services, and government sectors it is rising.
2. Unskilled jobs are growing quite rapidly but are declining among the blue collar workers.
3. Denver's economy is oriented toward trades and services.

A summary of the projections taken from Dr. Zubrow's study is presented in Tables, 1, 2, and 3. Table 1 shows projected employment for Denver SMSA to 1975 for the ten industries with the greatest growth. Table 2 gives present and projected (1970) increases in employment by skill level. Table 3 shows the ten occupations with the greatest projected growth to 1975. The data on which these tables are based are taken from preliminary tables prepared as a part of Dr. Zubrow's study and are current as of May 1968.

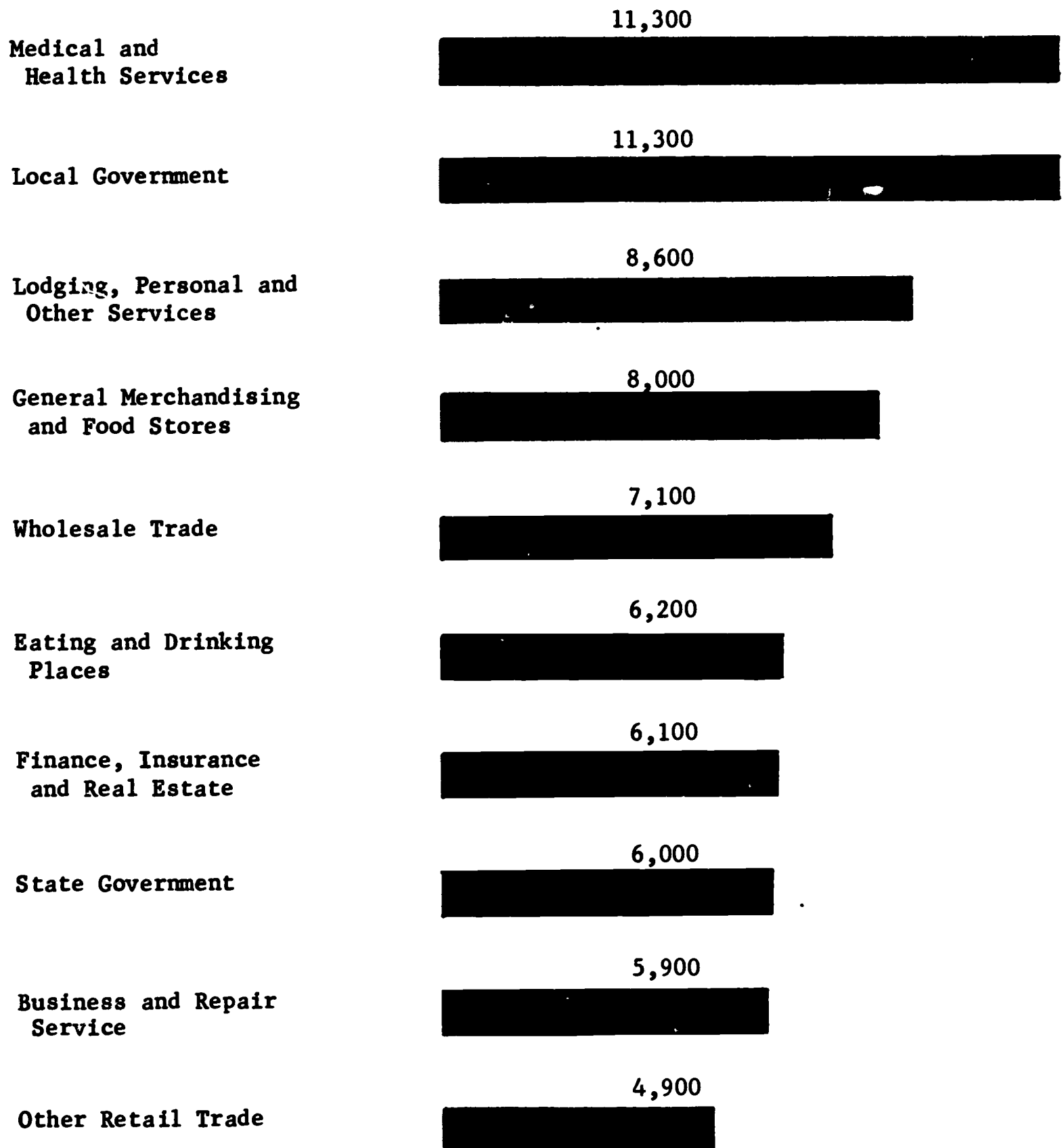
In summary, it can be said that the City and County of Denver has reached a stage in its development where a major social and economic transition is taking place. Denver is a comparatively new city and has had a rapid growth in recent years. Now, however, the boundaries are established and the internal area is reaching full utilization. Future developments will be determined by maintenance, redevelopment and in and out migration.

Population mobility patterns are becoming well established and commitments for housing, industrial capital, utilities, and other public investments have been made. These will tend, however, to become obsolete and in need of additional maintenance and replacement. In the meantime a pool of unmet needs and undereducated people has developed. In net results, the citizens of Denver will have to make an increased effort to prevent an increasing rate of decline and maintain the status quo. An even greater effort will be required to reverse and improve the situation.

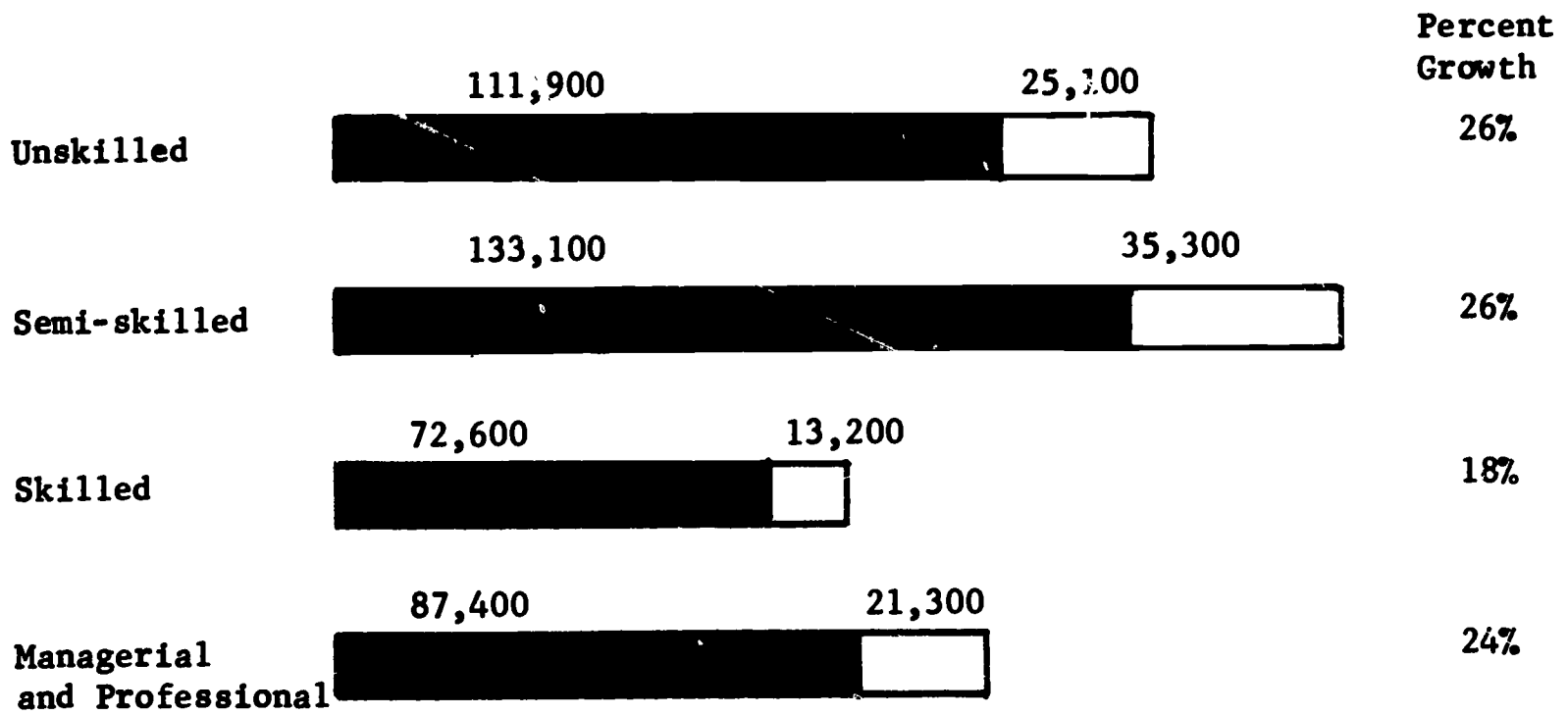
Denver is essentially a large regional distribution and service center with a lesser but balancing manufacturing component. Emphasis in the future labor force will be jobs in the fields of service, sales, and Government. Because of the projected changes in population it is only realistic to expect that additional effort will be necessary to maintain the present level of vocational education. An improvement upon the present situation can be expected only with a significant commitment on the part of the community.

CHART 2

TEN INDUSTRIES WITH THE  
GREATEST GROWTH PROJECTED  
TO 1975



**CHART 3**  
**PRESENT AND PROJECTED (1970)**  
**INCREASE IN EMPLOYMENT**  
**BY SKILL LEVEL**



**Present Jobs**

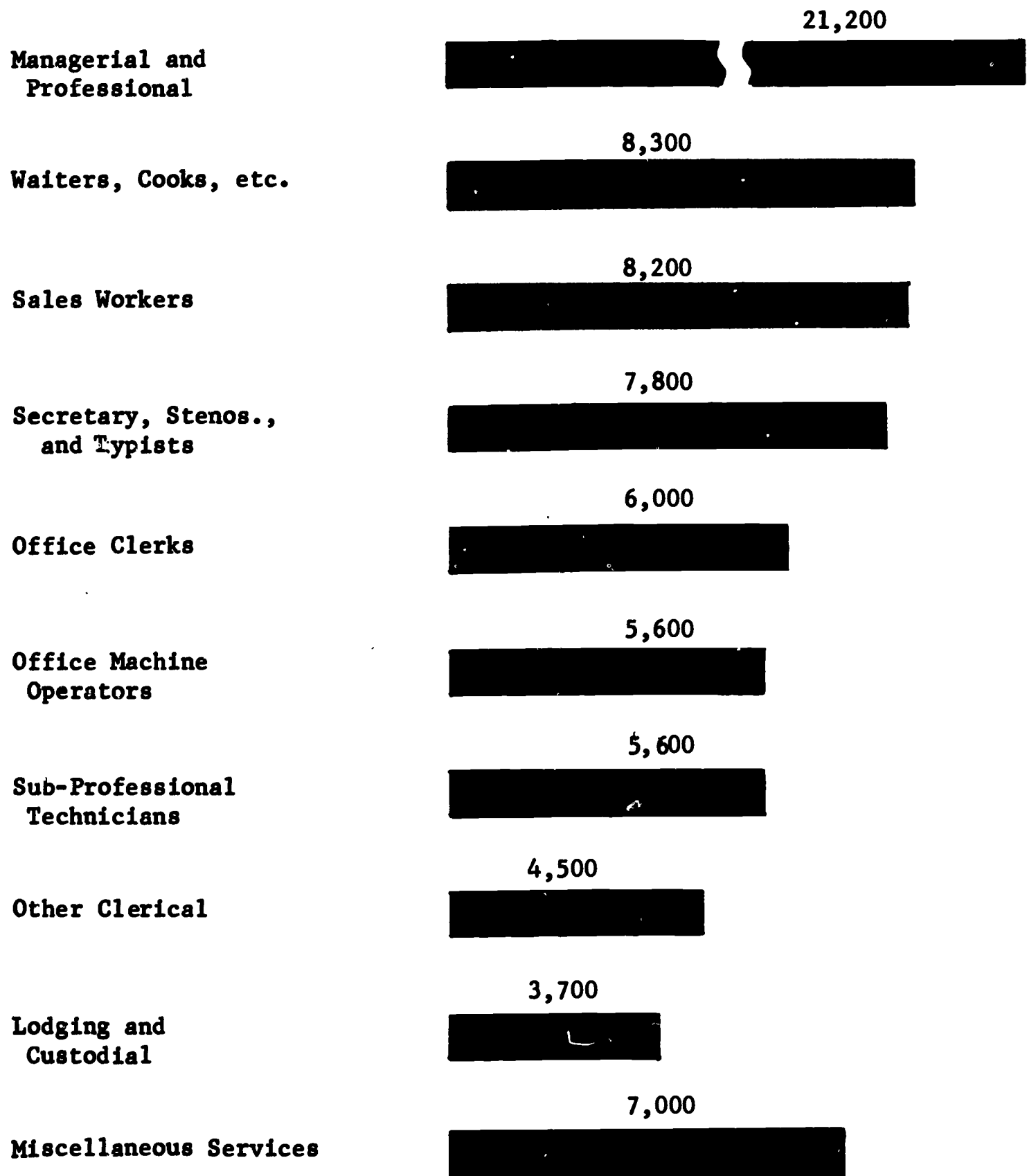


**New Jobs Projected to 1970**

Total New Jobs by 1970	94,900
Total Percent Growth	23%
Total Jobs by 1970	499,900

CHART 4

TEN OCCUPATIONS WITH THE  
GREATEST GROWTH PROJECTED  
to 1975



**CHAPTER III**  
**HIGH SCHOOL PRACTICAL ARTS**  
**AND**  
**PRIVATE OCCUPATIONAL TRAINING**

Three separate types of activities were conducted to obtain original data as a part of this Survey. They were: 1) an inventory of the classes, enrollments and facilities in the practical arts programs of the high schools, 2) a sampling of training activities, programs and enrollments at private business/technical schools and in business and industrial establishments; and, 3) a questionnaire utilized by the Emily Griffith Opportunity School staff to obtain more detailed information concerning the persons enrolled in classes at that School.

The first two are presented in this Chapter. Results of the Emily Griffith Opportunity School survey will be presented in Chapter IV.

In each case procedures were structured to produce important, and otherwise unavailable data directly relevant to developing an estimate of the present status of occupational preparation programs and needs for training as reflected in current programs. The school inventory would, in addition, provide a basis for estimating potential for initiating vocational education programs.

**Inventory of Present Practical Arts Programs**  
**in the Denver Public Secondary Schools**

An inventory of present curricula, facilities, and enrollments in Business Education, Home Economics Education, and Industrial Arts Education was conducted as one segment of this Survey. These areas were selected for investigation since they are most closely related to present and future occupational exploration and vocational education programs. As presently conceived the practical arts programs, made up of the above specialty areas, are a part of the general education curriculum of the public schools. They were established to achieve exploratory experiences in major components of the social, industrial, business, and home-and-family activities appropriate

to all citizens. As well as providing familiarity with the broad fields of business, industry, and homemaking, they include specific experiences with the tools, materials, understanding, functions, and processes of those areas. Additionally, they provide an element of guidance activities in becoming acquainted with the requirements of adult citizenship as they relate to the particular areas. They are not conceived to have occupational preparation and placement as a primary objective. Occupational preparation programs in vocational education would be an appropriate sequential activity after the general exploration activities.

The inventory of Practical Arts offerings in the Secondary Schools of Denver was conducted through a questionnaire format developed by the consultant team and actually carried out under direction of the Supervisors in each of the various areas by obtaining information directly from the teachers at each of the high schools. This approach was followed under the assumption that the individual teachers at the classroom level are the best judges of the actual activities and students in their classes. Supervisors and instructors reported that they had little difficulty with the instrument and were able to make meaningful judgments in the terms requested. All data based on this inventory must be interpreted as "best judgment." A copy of the inventory form and the Instructions and Interpretations are included in Appendix A. Separate enrollments and subtotals may not equal totals in all cases. Best estimates and additional data not reported directly on the inventory forms were used in establishing totals and percents reported later in this section. Summary tables for each area across all schools and a summary by each school in each area is included in Appendix A. The original data forms are available to the Denver Public Schools for further analysis and utilization in the planning phase.

The current situation in the Practical Arts areas seems to be an accumulation of past practices, local school needs and availability, individual teacher preferences and background, and making do with the best equipment and facilities available. There is wide variation and discrepancy in both types of programs and purpose in the same field and across fields from school to school. Many quality situations in terms of the teacher's objectives and in meeting a need of the students were in operation.

Interviews with staff members and supervisors indicate a general feeling that program development, innovation, and change have more often been discouraged than facilitated. Coordinated planning in light of well defined and established goals and directions at individual schools or across the total system was not in evidence. However, selected activities at several of the individual schools and in particular programs were being initiated. Several of these developments were associated with programs initiated with funds from the Elementary and Secondary Education Act. The Home Economics programs at North and West and the Career Metals program at Manual are examples. These programs and others were recognized by the administration, teaching staff, and consultant team as being appropriate and desirable innovations in better meeting the needs of some students. However, they appear to be initiated primarily from the concern of particular staff members and not a part of an overall plan. For example, no provisions were made for a sequence of experiences or for the following year activities of the group participating in the Career Metals exploration program at Manual.

The junior high school programs in the Practical Arts areas differed from location to location and were seldom coordinated for the flow of experiences from the junior high school to the high school. Course offerings and facilities have become oriented around a specific material or practice and have been perpetuated over time. Such development has resulted in the opportunity to gain depth in practice and skill in working with particular materials on a so-called "exploratory" basis and without reference to specific occupational preparation or requirements. Examples of such programs would include: 1) the possibility of taking six semesters of leather working in high school; 2) taking four to six semesters of clothing or foods in the Home Economics area and an equivalent amount of typing in the Business Education area. Such depth can only be justified when the total program is designed and organized to prepare for entry-level occupational competency. It cannot be justified on the basis of exploratory and guidance activities. Two or three years in metal working, woodworking, or drafting with the objective of becoming acquainted with the industrial world and its practices is highly questionable.



Several of the instructors clearly recognize their objective as being occupational preparation and are attempting to orient at least their advanced level courses in this direction. However, they are doing this without it being a part of an overall developmental plan for the school or the system.

A total of 15,542 students were enrolled in the three Practical Arts areas. By area, they were: Business Education 6,593; Home Economics 4,628; and Industrial Arts 4,321. In general, the total enrollment in the various high schools was inversely related to the college-going rate of each of the high schools. College entrance credits and requirements would be a factor in influencing such a relationship.

### Business Education

Business education in the high schools of Denver may be grouped into three types of courses:

1. Introductory general courses including a survey, general business course, business law, business math, etc., designed to gain understanding of the business world and the individual's role in this world.
2. Courses designed to develop personal skills such as typing, notehand and personal accounting and record keeping.
3. More advanced skills and practices that could be used in future employment.

All high schools offered a number of classes at the general business and personal skill level as well as at least some classes at the beginning occupational skill and advanced occupational skill level. Teachers in all of the schools saw at least their advanced level courses as providing experiences which would have potential value for entering the traditional occupations in the office and secretarial field such as: bookkeepers, clerks, typists, secretaries, and stenographers. However, the facilities reflected a heavy emphasis on typing only. Adequate office practice and secretarial type of equipment and facilities were quite limited. In a number of cases, stenography and other related practices were taught in general classrooms. In most cases the equipment was rated as being in fair to good condition and as limited to adequate for their present programs. However, in most

cases newer and additional equipment would be necessary for a program oriented to obtaining entry-level occupational competency. This is particularly true in the office practice, stenography, and office machine areas.

Enrollments by type of class were approximately: bookkeeping 462; general business courses 1200; shorthand and stenography 776 and typing, girls 2395 and boys 876.

In the judgment of the instructors of the various Business Education classes, they indicated that about 45% of the classes offered were made up of students who have an educational potential to complete occupational programs and obtain positions requiring skills approximately equivalent to what could be obtained at the advanced high school level. Such students may obtain their occupational preparation in the high school or at a post-high school institution, but the competencies and skills could be developed at the junior and senior high school level. An additional 28% of the classes were composed of students with an occupational potential generally equivalent to that which could be obtained at a post-high school level. Approximately 18% were classes with students with a four-year college potential, and an additional 7% of the classes had students who would likely achieve an occupational level that could be obtained in the high schools but at a level somewhat lower than the advanced high school programs. Several other classes were made up of a range of students across the various levels.

Although there was a significant number of boys enrolled in the Business Education classes (1824), a review of the enrollment by type of course reveals that the majority of the boys are enrolled in the beginning and personal typing classes (876) with the next most common enrollment in the more general courses of business math, business law, and other survey business courses (618).

All high schools except South and Lincoln had at least a few vacant periods that might be utilized in program expansion and re-organization. In some cases the number of vacant periods indicated on the specific high school summary sheet in Appendix A are somewhat misleading. In some cases the space or equipment organization was not appropriate for classes that might be developed.

No equipment or programs for developing competencies in business data processing or more modern accounting and unit record procedures were available in the secondary schools.

Utilization of a part-time cooperative program whereby the advanced students spend a part of the day actually employed in out-of-school learning situations was being used to a limited extent. This type of program was available in only one limited career clerical program. Close contact and exchange of information between the business teachers and the representatives of the business world appeared quite limited. Extensive use of such programs is made in many high schools to provide learning experiences not possible, or quite expensive due to specialized equipment, within the school itself.

#### Home Economics Education

There were 4,628 Home Economics students enrolled in 208 classes across all secondary schools. From 22 to 29 classes were offered in each school except Jefferson and Washington - they have 11 and 13 classes, respectively. Of the approximately 250 boys enrolled in Home Economics classes, the majority were participating in classes for "Boys Foods." At Washington, one of the Home Economics laboratories had been converted for use in the science area. The joint junior and senior high school programs at Jefferson and Kennedy may help to account for the larger number of vacant periods in the Home Economics laboratories. The other high schools had relatively high utilization of facilities with the exception of West. Initiation of the career home economics program in the Butler Building has allowed for a more adequate program at West High School where the space and facilities were somewhat inadequate for full classes.

Course offerings in the Home Economics area throughout the secondary schools reflects a high orientation to the traditional areas of foods and clothing. A significant majority of all classes and enrollments were in one or the other of these two areas. Initiation of the career homemaking programs and materials with occupational orientation existed in some classes on a very limited basis. This type of offering is reflective of the philosophy and programs exhibited across the country in the Home Economics area. Enrollment in the various foods courses totaled approximately 1199 girls and 180 boys and 1516 in clothing courses.

Recent developments, particularly under provisions of the Vocational Education Act of 1963, have given a second and additional objective to the Home Economics area, that of occupational preparation in areas related to Home Economics. At present, there are essentially two schools of thought among Home Economics educators. These two schools of thought are represented by the present staff in Denver. The traditional school holds that the Home Economics classes should be primarily for homemaking activities as a part of being a successful wife and mother. Activities related to the dual role of homemaker and wage earner are being introduced in this area.

All Home Economics educators support the above objective and program to obtain it. However, since most women will spend twenty-five or more years in employment outside the home, additional preparation for wage earning competency must also be developed. Occupational preparation in areas requiring knowledges and skills closely related to Home Economics should be provided by Home Economics programs. There should be no controversy between the goals of the two types of program; both preparation to be a successful homemaker and mother and participate in the labor force are recognized as legitimate and necessary activities in our present social system.

In the judgment of the individual instructors, students in approximately 25% of the Home Economics classes had the educational potential to enter and complete a college level program; while approximately 15% were estimated to have potential at a level which would require preparation at about the junior college level. Approximately 60%, 40% at the advanced high school level and 20% at the lower high school level, were probably capable of completing an occupational program and successfully participating in the labor force at a level where preparation could be provided at advanced high school class level. Judgments by the teaching staff relative to the junior college level were somewhat difficult due to the relatively recent development of programs at this level and the lack of familiarity with this type of program. There was a wide range among the schools in the proportionate number in each of the categories.

In general, the facilities had equipment which was in good condition and adequate-to-limited in extensiveness for current programs. Only the Butler Building and one or two other locations could be adequately equipped

for initiating in-school occupational preparation programs for the wage earning occupations. The lack of emphasis and consideration of occupational preparation programs was reflected in the instructors' suggestions of present course value for occupational use. The most commonly mentioned possibilities for employment were in the sewing and alterations area and the food service area as: cooks, waitresses, and related activities.

### Industrial Arts

Industrial Arts programs were offered in all secondary schools of the City. The 4,321 students were enrolled in 224 different classes. By high school, they ranged from eleven at Jefferson to 34 at North. With few exceptions, the majority of enrollment was in the traditional areas of drafting, woodworking, metal working and crafts. At least 880 persons were enrolled in crafts and leatherworking courses. The most comprehensive offerings were at West where the classes ranged from career metal working on a occupational exploration and preparation basis to pre-engineering drawing. Addition of the career programs at West and Manual and the building trades class at Manual are reflective of attempts to orient the Industrial Arts classes toward occupational competency.

As in the Business and Home Economics areas the offerings and classes were oriented around a specific materials area and very little evidence of attempting to provide a comprehensive and broad based occupational exploration activity was in evidence. A traditional objective of Industrial Arts programs has been to provide exploratory and guidance experiences, an interest in appreciating design, developing leisure time interests and possibly pre-vocational experiences to acquaint the students with materials, tools, and processes of industry. A broader objective accepted by many people is an understanding of our industrial and technological society so that they may better take their place in adult life. The general education value of industrial arts is not questioned if it is, in practice, conducted to meet these objectives. However, it would appear that a clarification of objectives for the Denver Public School program and a re-evaluation of offerings should be made in light of determined objectives. Continuation of existing courses and addition of new sections without definite sequence and purpose is questionable.



Approximately 1400 students, including 65 girls were enrolled in drafting classes. All classes were listed as mechanical drafting although some architectural drafting was included in some courses. In other areas: 900 in woodworking; 685 in metalworking; 280 in electricity-electronics; 114 in vocational classes and 42 in printing.

At least four areas were particularly obvious by their very limited extent or omission. Only East, Lincoln and West offer preparation in the electricity-electronics area and only West has classes in the graphic arts-printing field. No programs in power mechanics, including automotive and fluid power, were reported although a new automotive facility, Butler Building, and program will be started at Manual in the fall of 1968.

Plastics and synthetics is a major industry in the United States and in the Denver area; however, the only experiences provided with these materials was as a part of the crafts program. Practically every person has daily contact with and a dependence upon each of the above industries. Evidence of the need for preparation in these fields is shown by the large enrollments in the Opportunity School, private technical schools and in industry programs.

In the judgment of the instructors approximately 50% of the students enrolled in the Industrial Arts program had an educational potential for occupations requiring that equivalent to advanced high school preparation. Approximately 15%, or slightly more, were indicated at each of the other three levels. The greatest effort was being made at Manual to provide preparation which would be appropriate to the beginning or advanced skill level. A great majority of all offerings were at the exploratory level.

There were at least a few vacant periods in practically all schools and in most laboratories. In general, the instructors felt that it would be possible to offer some occupational preparation programs in existing laboratories if the equipment were updated and additional space was provided. In many cases the laboratories were not properly designed for the activities conducted. In several locations regular classrooms, sometimes with a dividing wall removed to provide a double classroom space, were the only adaptation made from the regular classroom building design. The equipment in the majority of the rooms was rated as being in good condition. Five laboratories had fair equipment and eight were listed as being in poor condition while nine were in excellent condition. No laboratory was adequately



equipped for a full occupational preparation program at present, with the possible exception of some drafting rooms. In most cases updated and more comprehensive equipment would have to be available for developing occupational competency programs.

Instructors indicated that the offerings of the present program would have potential value for occupations in metalworking, drafting, woodworking, and in a few cases electronics, jewelry and silversmithing and the graphics industries.

#### Other Practical Arts and Vocational Areas

Business Education, Home Economics and Industrial Arts are offered as regular courses and department areas within each secondary school. Some courses supportive of distributive education were available as related courses in most schools. No programs oriented to the general education value, occupational exploration, and occupational preparation in the health field were offered in the high schools. A third area, commercial art and illustration, was being given some attention in the art courses. In fact, some courses were titled commercial art but were not oriented directly to entry-level preparation.

#### Distributive Education

During the 1967-68 school year and prior, students were enrolled in the part-time cooperative distributive education which was oriented to occupational preparation. During the last year approximately 300 students, representing enrollment from all nine high schools, were enrolled. Past practice has been for a distributive education staff member from the Opportunity School to teach the related class and provide the on-the-job supervision for the various high schools. This type of an arrangement does not provide for the close articulation of the distributive education supervisor, counselors and other staff members at the local schools. In effect, the students were participating in a somewhat separate and outside program rather than distributive education being an integral part of the activities at each local school.

Arrangements are being made whereby the distributive education staff member will be a part of the regular faculty at each of the high schools.

This arrangement should result in much closer articulation and identity to the total program of occupational preparation at each high school. An expansion of this type of activity would be desirable.

#### Health Occupations

Employment in the Health Service Occupations from the professional level to the unskilled service level is one of the largest employment areas in the United States today and is one of the largest in the City of Denver and the surrounding area. There has been a rapid expansion in this area and the increase is expected to continue. Information about and acquaintance with the opportunities in this broad and increasing field should be a part of the guidance, occupational exploration, and occupational preparation program at the high school level. Both in-school and part-time cooperative programs have been arranged in many school systems. Informal club activities such as the Candy Strippers and Future Nurses Club activities have been utilized. However, the addition of more systematic exploration and preparation for this field would be highly desirable.

#### Commercial Art and Illustration

Commercial art and illustration opportunities from the advertising field to medical illustration and technical reporting have close commonalities with instructional areas in other fields such as graphic arts, drafting, photography, and the art field itself. Again, this field provides potential for and could appropriately be offered as a part of a sequence for several purposes. The esthetic or cultural values of knowing and appreciating good design and art, utilization of art activities in leisure time and exploration and preparation for entry into the occupational field at an appropriate level should be a part of a total program.

### **Inventory of Training in Selected Industries and Private Training Institutions**

An informal interview-survey was conducted by personnel from the Emily Griffith Opportunity School under the direction of Mr. Melvin Crites following a format and instructions developed by the consultant group. The purpose of this survey was to establish an estimate of the type and amount of occupationally oriented preparation available in the City of Denver and the area immediately adjacent to it.

The totals shown in detail by category in Appendix B, the numbers of students enrolled and the types of programs attended cannot be interpreted as representing a relative proportion of the total training available. The data and types of programs are illustrative only.

It should be noted that most of the industries and institutions contacted had a high desire to be cooperative in providing information and to participate in the overall activities of the City and an increase in occupational preparation and placement. However, some of the larger employers were reluctant to provide the additional personnel time to review their records and provide full information. Their general position was that many official agencies as well as interested groups have requested similar types and classification of information on a continuing basis. Providing information for each activity and interest is consuming a considerable amount of personnel time which results in excessive costs to the business. Racial data and many other similar types of data are provided to official Federal agencies on a regular basis. It is not possible to obtain information from their reports since they were covered by security provisions.

The underlying desire to cooperate and participate in community development activities should be recognized. However, the increasing number of different groups, studies and surveys without coordination may very easily cause these industries and employers to withdraw from participation. Their position is quite legitimate and should be recognized as such. In no case did the interviewers press beyond the initial level of cooperation and availability of data. This procedure resulted in several employers within the area not being represented. The private and proprietary schools were most cooperative in providing information.

#### Private Business and Technical Schools

In total, 5,184 students were enrolled in the 31 private and proprietary schools interviewed. The largest single area of preparation was in the business, secretarial, and data processing areas. In the skilled or technical area,

automotive and electronics, including television repair, was the largest. In the miscellaneous category, flying and aviation, and the medical and health field were the larger areas. In most cases the programs were of a type, length, and level that would be appropriate as a part of a comprehensive secondary vocational education program.

The State Board for Community Colleges and Occupational Education under their private school licensure provision had licensed a total of 70 such schools following the 1966 legislation. There has been an increase in the number of schools in Denver and the immediate area in recent months. The growth in the number of schools and enrollment would indicate that there was a significant demand for occupational preparation and upgrading opportunities. A majority of the courses required high school graduation, and, therefore would be a limitation to those who have not completed high school prior to application. Another strong implication in reviewing the programs and enrollments was that there existed a strong demand for short-term, two-to-ten or twelve week programs. Very often, the formal junior college program in the occupational area insists upon full semester, year or two-year courses and does not attract, or meet the need of, the group desirous of the shorter term training. The Opportunity School does provide shorter term opportunities. Many of the courses offered by the private schools were in the same areas also available at the Opportunity School.

#### Training and Educational Programs Offered by Hospitals

Seven hospitals were included in this category during the interviews. A total of 351 persons were identified as being in training. Programs were offered at all levels from the short-term nurse aide program to the two-year and four-year technology and professional nursing programs.

Hospitals and other health agencies are in a relatively unique position in the occupational preparation field. In many cases no formal educational institution can successfully accomplish the occupational preparation program without joint and cooperative arrangements for clinical experiences in the hospitals and health establishments. It is possible that some of the enroll-

ment at the Opportunity School was duplicated in the enrollment shown for the hospitals. Coordination among the various formal educational agencies and the hospital and health establishments will have to be coordinated to make maximum use of available clinical training facilities. Other areas of training such as medical laboratory technicians and assistants, and dental assistants and technicians are not included in the list of programs but are known to exist within the hospitals and other health facilities.

### Training Within Industry

A total of five large and twenty-seven other industries were included in the survey-interview procedure. The number of employees in these industries ranged from 59 to 5,200. A great majority of all programs and enrollment are included in the relatively short-term, entry-level type of training. Within this group the largest category, almost 2000, was in the sales field. This group includes retail clerks in department stores, supermarkets, and other retail establishments. Sales and distribution occupations were represented in many different categories and would be the areas most appropriate for placement as a part of the distributive education program of the high schools. Many specialty areas would likely not be appropriate programs for high school offerings. However, an occupational exploration and acquaintanceship program in the schools would provide a valuable background and guidance function for students. High enrollments in the very short, entry training programs would imply a relatively high turnover in many of the occupations.

## CHAPTER IV

### THE OPPORTUNITY SCHOOL AND THE METRO YOUTH CENTER

#### The Emily Griffith Opportunity School

The Opportunity School enjoys a quite favorable image and loyal support from the citizens of Denver. Many citizens have at one time or another participated in programs under its sponsorship. Although there is a good general understanding of the Opportunity School's role and programs, many do not have a full or clear understanding. Several persons interviewed were not clear on just what was offered or who sponsored it, but they knew in general that any person could attend and that it was a good school.

It is seen by the adults, faculty, and high school students as a school for adults, not generally for high school students. Two types of programs are offered by the Opportunity School for high school students concurrent with enrollment in the regular high schools:

1. Teaching and supervising the part-time cooperative program in distributive education at the local high schools by Griffith personnel.
2. Enrollment of high school students in regular classes offered by Griffith in their own facilities.

The number of students served is relatively small in each case.

The Opportunity School, conceived to provide a service to both the citizens and industry in Denver, relies heavily on advisory committees in determining which training will be offered. Many are initiated at the request of local industry and in consultation with the advisory committees. It should be pointed out, however, that many of these classes and programs are conducted for specific companies, agencies, or groups and are not open for enrollment to any student. A relatively higher percentage of the job preparation and job advancement classes are in this category. It should also be mentioned that the Opportunity School offers training for Denver Public School personnel in such areas as building maintenance and the school lunch program as a part of the adult education program. Courses are also being taught for Metropolitan State College under contract at present.



Many potential students do not see enrollment in classes at Griffith as a desirable choice. Attendance and participation of high school students in classes and activities at Griffith with the larger number of adult students produces a situation less desirable for both staff and students.

By image and operation, the Griffith School is semi-autonomous and to a large extent separate from the Denver Public Schools. Many citizens are unaware of any direct relationship. Within the school system, the semiseparateness also exists. Policies and regulations for the teachers at the Emily Griffith School and the remainder of the Denver Public Schools are different. Teachers at Emily Griffith typically have backgrounds in the occupational areas in which they teach, whereas those in the Denver Public Schools have backgrounds in formal education. Salary scales and teaching contracts differ and they have chosen to affiliate with different professional associations. As the high schools initiate vocational education programs they will have need for teachers with backgrounds and preparation similar to those now employed at Griffith. Specialized facilities, use of advisory committees, program approval, and funding arrangements with state and federal agencies are additional areas where all schools will be involved.

As the programs in Emily Griffith become articulated with the vocational offerings in the high schools, regulations and policies governing these two types of institutions should be the same. Policies regarding tenure, salary, and operations should be consistent within the same organizational structure--the Denver Public Schools.

#### Metropolitan Youth Education Center

The first Metropolitan Youth Education Center was conceived and established to meet the needs of the school drop-outs and the unemployed or underemployed youth up to 21 years of age. The program was organized to meet individual needs in small groups with close staff contact and with close working relationships with guidance and counseling services.

The initial Center, Kalamath, initiated academic classes in November 1966 and vocational classes in February 1967. The 1966-67 report indicated that a total of 1,378 pupils were enrolled at one time or another in courses at the Center during the first partial year of operation. The second year of operation has seen a rapid increase in activities and enrollment. Enrollment data are difficult to compare precisely with enrollment in the regular school programs due to the fact that classes are scheduled to be most convenient to

the students. Also, a number of sections are established to upgrade the student's educational background to a point where he may obtain high school completion through the equivalency examinations. Students may enroll for one specific class or a combination of classes. If they lack one or more units for their high school diploma they may enroll for that unit only and be awarded a high school diploma upon completion of the total requirement.

Enrollment during the 1967-68 year is estimated to be approximately 2,500 different individuals. A waiting list has developed, although estimating numbers actually on the waiting list is difficult. If openings are immediately available the student may enroll, but if a delay is incurred, some other decision or action may be taken that will cause him not to enroll when an opening does occur. A report in late May 1968 indicated approximately 800 students enrolled in the Kalamath Center and 27 Denver students enrolled in the Jefferson County Center. Approximately 250 were actively on the waiting list at that time. In effect, the Kalamath Youth Center has contact with almost as many students as one of the regular high schools.

The Evaluation Report 1966-67, on the Title I, Elementary and Secondary Education Act Programs, reports the results of a survey of the teachers and pupils associated with the Metro Youth Center and others in the school system and community indicate that this type of educational program is meeting with what must be described as unprecedented success for the City of Denver. Although the Emily Griffith Opportunity School has offered equivalent types of high school completion programs that were available to the youth, a significant backlog of youth who had dropped out of the regular program were sufficiently interested in completing their education program to enroll in this program. A close working relationship of the teachers, small class size, and a high level of flexibility in scheduling to meet the students' needs appeared to be primary factors in this success. The students indicated that they felt the Metro Center had a great deal more to offer them than the regular high school programs. A high level of satisfaction was reflected across both students and instructional staff. They felt that the Center was having an important effect on their way of life and their future.

The principle of operating the Metro and other Youth Centers cooperatively with Jefferson County, and possibly with other adjoining school districts, is to be highly recommended. With the large number of students who have not completed high school in the City of Denver, it would appear that a more detailed

exploration should be given to the possibility of utilizing additional Centers geographically dispersed to reach a larger number of students. Offering one centralized program for all youth in this group would very likely lose the effectiveness it now enjoys.

The staff reported that the best referral source for new students was through students who have had desirable and successful experiences at the Center. This illustrates a principle that may be effectively utilized in establishing community adult centers. Many adult and special programs have also found that the most effective source of contact and referral is through satisfied participants in a special program. The fact that 52% of all students were enrolled in occupational preparation or vocational educational courses underscores the existing desire and need for this type of program by high school age youth. The 52% was found during the 1966-67 year when the vocational programs were in existence for less than a half year. A sizeable increase in the percentage of total students in such courses has been found for the 1967-68 year.

### Survey of Enrollments in the Opportunity School

#### Overview

As mentioned earlier in this report, a detailed investigation was conducted of the offerings by the Emily Griffith Opportunity School. The instrument and institutions used for this investigation are included as Appendix C. Summary data from this survey are presented in Table 1.

The survey reported in this chapter was conducted during the week of April 22. The total figures by each area of instruction as well as the grand total are therefore much lower than total annual registrations reported by the Opportunity School. The total registrations for the 1966-67 academic year are presented in Tables 2.0 through 2.3 together with the totals on which this study is based.

There were approximately 1,000 enrollments in parent education and pre-school training involved in the Headstart Program that were not included in this Study. In addition, there were also approximately 200 unusable returns, and incomplete data on some questionnaires have resulted in totals within specific categories (age, sex, etc.) that are less than the grand total of 7,419.

TABLE i

COMPARISONS OF ENROLLMENTS IN PRESENT STUDY AND  
TOTAL ANNUAL REGISTRATIONS FOR 1966-1967

	Total Enrollment Present Study	Total Registrations May 1, 1966-April 30, 1967*
Apprenticeship Training	527	2,060
Business Education	1,367	9,763
Distributive Education-General	470	2,563 ***
Distributive Education-High School	287	
General Education	908	9,478
Home Economics	1,756	5,852
Trade and Industrial	1,716	7,863
Non-Health MDTA	99	**
Health, incl. MDTA Health	289	**
Parent Education and Preschool	**	5,133
Child Development Centers	**	1,912
	7,419	44,624

\* Taken from Annual Report, 1966-1967, Emily Griffith Opportunity School, Denver Public Schools

\*\* No corresponding category

\*\*\* Includes General and High School Distributive Education

TABLE 2.0  
SUMMARY OF ENROLLMENT AT OPPORTUNITY SCHOOL

TYPE	AGE				SEX		HIGHEST GRADE ACHIEVED								
	Total Enroll.	20 or less	21 to 25	26 to 40	41 & over	Male	Female	Full-time	Part-time	Number Enrolled in Other Courses	8 or less	9 to 11	12	13 to 15	16 or over
Apprent.	527	104	252	159	6	523	2	31	494	47	3	351	101	55	12
Bus. Ed.	1367	367	234	394	351	281	1044	281	1063	378	29	252	772	257	69
Dist. Ed. General	470	25	66	194	169	278	192	24	427	61	10	22	233	103	87
D.E. H.S.	287	287	0	0	0	111	172	262	16	1	0	267	15	0	0
Gen. Ed.	908	94	157	326	283	361	540	191	681	359	162	221	319	71	63
Home. Ec.	1756	28	166	585	927	34	1713	18	1712	286	123	149	766	363	301
T & I	1716	312	233	731	377	1578	108	456	1222	207	84	321	997	150	104
Non-Health MDTA	99	15	25	42	15	70	28	61	36	16	30	38	28	0	1
Health Ed.#	289	99	60	73	59	11	276	174	112	37	0	12	208	59	1
TOTAL	7419	1323	1193	2504	2188	3247	4075	1498	5763	1392	441	1633	3439	1058	638

#Includes 44 students in three MDTA classes.

TABLE 2.1  
SUMMARY OF ENROLLMENT AT OPPORTUNITY SCHOOL

HIGH SCHOOL DISTRICT NOW LIVING

TYPE	North	East	South	West	Manual	Lincoln	Wash.	JFK	Jeff.	Not in Denver
Apprent.	41	21	35	41	13	35	16	3	3	272
Bus. Ed.	166	294	139	121	67	136	95	29	36	211
Dist. Ed. General	34	73	51	17	14	39	37	10	20	121
D.E. H.S.	60	12	43	42	11	51	27	12	23	0
Gen. Ed.	115	221	106	84	69	46	79	16	32	53
Home Ec.	228	300	278	97	101	178	248	70	157	23
T & I	141	191	141	139	89	139	119	42	27	457
Non-Health MDTA	14	9	1	19	13	8	3	0	0	22
Health Ed.#	30	67	25	14	19	28	21	4	9	63
TOTAL	829	1188	819	574	396	660	645	186	307	1222

#Includes 44 students in three MDTA classes.



TABLE 2.2

## SUMMARY OF ENROLLMENT OF OPPORTUNITY SCHOOL

## HIGH SCHOOL ATTENDED IN DENVER

TYPE	H.S. Training in Denver		North	East	South	West	Manual	Lincoln	Wash.	JFK	Jeff.	High School Training in Denver 1966-68
	Yes	No										
Apprent.	192	329	31	14	25	34	20	25	8	2	3	36
Bus. Ed.	501	952	74	72	52	80	73	48	26	8	6	205
Dist. Ed. General	124	344	22	22	26	23	12	5	3	0	1	17
D E H.S.	281	4	58	12	38	49	11	51	27	12	25	279
Gen.H.S.	238	652	42	31	32	40	41	11	7	2	2	32
Home Ec.	476	1255	105	73	80	69	46	8	58	0	4	14
T & I	584	1077	78	80	74	107	87	46	48	14	8	235
Non-Health MDTA	29	65	2	1	3	6	9	3	0	0	0	4
Health Ed #	112	172	22	11	24	7	12	7	9	2	2	52
TOTAL	2537	4751	434	316	354	415	311	204	186	40	51	874

#Includes 44 students in three MDTA classes.

TABLE 2.3  
SUMMARY OF ENROLLMENT AT OPPORTUNITY SCHOOL

TYPE	PURPOSE FOR ATTENDING CLASS							RACE			
	Get a Job	Job Adv.	For H.S. Diplo.	Impro. Ed. Skl.	Effec. Citizen	Better Family Member	Rehab.	Negro	White	Spanish	Other
Apprent.	32	477	1	0	2	0	6	11	443	67	2
Bus. Ed.	482	629	128	41	60	6	15	187	912	238	90
Dist. Ed. General	43	345	2	4	56	7	5	19	414	35	0
D E H.S.	10	15	235	0	3	0	0	10	225	46	0
Gen. H.S.	58	114	220	148	228	48	42	94	527	221	3
Home Ec.	64	65	17	5	104	1404	39	92	1481	113	51
T & I	404	1019	62	33	63	23	52	137	1199	342	1
Non-Health MDTA	20	48	21	9	0	0	0	18	31	47	0
Health Ed. #	89	164	6	0	15	0	14	37	222	27	1
TOTAL	1202	2876	592	240	531	1490	173	605	5454	1136	148

#includes 44 students in three MDTA classes.

An overview of the offerings by the Emily Griffith School can be obtained by looking at the distribution of total enrollments by the several categories shown in the table, i.e., age, sex, full-time vs. part-time. etc. For example, it can be seen from this table that 18% of the enrollments in Emily Griffith are 20 years old or less, 16% are in the 21 to 25 age bracket, 34% are 26 through 40, and 29% are 41 and over. Of the total enrollments, 55% are female and 45% male. Seventy-eight percent of the enrollments are part-time students, while 22% are enrolled on a full-time basis. Regarding educational attainment, 6% have achieved an 8th grade education or less, 22% have achieved an educational level between the 9th and 11th grades, and 46% have achieved a high school education. Above the high school level, 14% of the total enrollments have achieved an education of at least one to three years beyond the high school level, while 8% have achieved at least 4 years of formal education beyond high school.

The distribution of enrollments by high school districts provides some important data. In discussing participation by high school district, it must be kept in mind that factors such as population, average educational attainment, etc., would argue against equal participation. Nevertheless, it is felt to be a meaningful index in the context of this Survey. This distribution, even within the poverty area, suggests some inequity in participation. For example, only 5% of the total enrollments are from the Manual High School District, one which would appear to have the highest need. Eight percent of the enrollments are in the West High School District, with 11% being in the North District, and 16% in East District. Since these districts represent the areas with the highest concentration of poverty one might expect a greater enrollment in the courses offered by Emily Griffith. As might be expected, the more affluent school districts have relatively low enrollment in Griffith programs. For example, Kennedy High School District accounts for less than 3% of the total enrollment. It should also be noted that 16% of the enrollments in Griffith programs are students who live outside the City of Denver, and that 64% did not receive their high school training in Denver. This is not surprising in view of the high immigration.

The purpose of attending class provides some useful insights. The largest category was "Job Advancement," which accounted for 39%, while 16% of the enrollments were "To get a job." Therefore, over half of the enrollments have direct implications for employment. Eight percent of the enrollments

were to get a high school diploma which also has implications for employment. One in five enrollments were to become a better family member.

Data on enrollments by race indicate that 74% are white, 15% are Spanish surname, and 8% are Negro. The higher population of people of Spanish surname than of Negroes and the generally lower income level for people of Spanish surname in Denver, suggests that they are taking advantage of opportunities at Emily Griffith to a somewhat higher degree than are Negroes.

### Apprenticeship Training

After examining the data in the table in more detail it can be seen that apprenticeship training which accounts for 7% of total enrollments, is distributed across the age groups as would be expected. Twenty percent of those in apprenticeship training were 20 years old or less, 48% were in the 21 to 25 age group, and 31% were over 26 years of age. It can also be seen that 67% of those enrolled in apprenticeship training had not completed a high school education, 19% had a high school education, and 13% had received formal education beyond the high school level. In examining the distribution of apprenticeship enrollments by high school districts, it can be seen that only 18% of the total apprenticeship enrollments come from what might be referred to as the poverty high school districts--North, West, and Manual. Again, it is apparent that Manual has the lowest enrollment in this type of training, students from this district accounting for only 2% of the total apprenticeship enrollments. Particularly revealing is the fact that 52% of the students enrolled in apprenticeship training do not now live in Denver. This is in contrast with the previously quoted figure of 16%, representing the proportion of total enrollments that do not live in Denver. It is obvious that this program is serving the residents of Denver disproportionately less than one might expect, particularly considering the concentration of poverty within the City.

The purposes reported for attending apprenticeship training follow the pattern that would be expected with the vast majority of students enrolled for job advancement. The distribution of apprentices by race shows that 84% of the enrollments are white, 13% are Spanish surname, and only 2% are Negro.

### Business Education

Business Education accounts for 19% of the total enrollments at Griffith. The distribution of Business Education enrollments by age shows that 27% are 20 years old or less, 17% are 21 to 25, 29% are 26 to 40, and 26% are 41 years and over. This is not particularly surprising since there are fewer age restrictions on people wanting to go into business. Again as might be expected the majority of enrollments in this area are female and part-time students. Eighty percent of those enrolled in Business Education have received a high school level education or better as might be expected from the usual job requirements for secretarial work. In contrast with the apprenticeship programs, only 15% of the enrollment in Business Education are from outside the City of Denver. The distribution of Business Education enrollments by high schools shows that 26% are from the poverty area, herein defined as the Manual, West, and North High School Districts. However, only 5% of the total business enrollments are from the Manual District which has the highest concentration of poverty, again reflecting the lack of participation from this area. As might be expected, high school districts located in higher social economic areas have a relatively low enrollment in Business Education. This is probably a reflection of the high proportion of students going on to college.

Eighty-one percent of the enrollments in Business Education were for job entry or job improvement whereas 9% were enrolled for a high school diploma. Also, 9% of the total enrollments were for all other reasons although the distribution within these does not appear to reveal anything meaningful about vocational education for Denver. The distribution by race shows that 67% of the enrollments were white, 17% were Spanish surname, and 14% were Negro. It should be noted that there is a relatively high enrollment of Negroes in the business program. Of the total Negro enrollments, 31% are in business. For people of Spanish surname 21% of the total enrollments are in business. It is also important to point out that 7% of the total business enrollment are in "other" category (mostly Oriental and American Indian). These enrollments in Business Education account for 61% of the total of the "other" category. It should also be pointed out that the business category and the home economics category are the only two that have significant "other" enrollments, the two categories accounting for 95% of the total.

### Distributive Education

It can be seen from Table 2.0 that 6% of the total enrollments in the Opportunity School are in Distributive Education. The age distribution shows that 77% are for students 26 years or older, 59% of the enrollments are male and 41% female, and 91% of the total enrollments in Distributive Education are part-time students. Table 2.0 indicates that 90% of these enrollments are students who have a high school education or better. The above data, and the fact that 73% of the enrollments in Distributive Education are listed as "job advancement," suggest that the Distributive Education Program at Emily Griffith is serving a relatively high educational group of older citizens who probably are now employed and are taking part-time work in the hopes of occupational advancement. Inspection of detailed data not presented in Table 2.0 indicates that most of these enrollments are in the areas of insurance and real estate.

Table 2.3 also shows that 88% of the enrollees in the Distributive Education Program are white, suggesting that this program is attracting relatively few of the two minority groups that constitute the majority of the population in the poverty area.

### Distributive Education - High School

The Distributive Education for high school students presents a different pattern than the rest of the programs in Tables 2.0 through 2.3. This program is operated for the high schools by the Emily Griffith Opportunity School and therefore little can be said about such factors as age distribution, highest grade achieved, reason for attending, etc. One important observation on this group should be noted, however. This program appears to be serving the needs of students in the poverty group, herein defined as North, West, and Manual, comparatively well. Thirty-nine percent of the total enrollment in the Distributive Education Program are from these three high schools. It should be pointed out that cooperative training programs such as this have great potential for assisting the disadvantaged and more widespread use of such programs, particularly in the poverty areas, is highly desirable. It should also be pointed out, however, that Manual again has a disproportionately low enrollment in this program, enrollment from Manual representing only 4% of the total enrollments in Distributive Education. It should also be noted that



78% of the enrollments in the Distributive Education program are white, 16% Spanish surname, and only 3% Negro.

#### General Education

The General Education program at the Opportunity School accounts for 12% of the total enrollment. Approximately two-thirds of these are individuals 26 years and above. Twenty-four percent of the total enrollments in this program are for the purpose of obtaining a high school diploma. While one would expect a higher enrollment for the purpose of obtaining a high school diploma in a program designed for General Education, it is probable that many adult basic education students are involved in this program and these students give their reason for attending as "improving educational skills" or "becoming more effective citizens."

Fifty-eight percent of enrollments in this program are white, 24% are Spanish surname, and 10% are Negro. It appears that there is a relatively higher participation in this program by minority groups than in those discussed above. In fact, of the total Negro enrollments, General Education accounts for 16%. As might be expected a large porportion, 94%, of the enrollments in this program are from the City of Denver.

#### Home Economics

Enrollments in the Home Economics program account for 24% of the total for the Opportunity School. However, examining the data in the Tables shows that the majority of enrollments in this program have little or no occupational relevance. For example, 86% of the enrollments are 26 years or older, 97% are part-time, 81% have a high school education or better, and 80% of the enrollment lists "better family member" as the reason for taking this course. An examination of the courses offered in this area supports the conclusion that the Home Economics program as now constituted has little or no occupational relevance.

#### Trade and Industrial Education

One of the largest and most important areas listed in Tables 2.0 through 2.3 is Trade and Industrial Education which accounts for 23% of the total enrollments at Emily Griffith. Trade and Industrial Education has great potential for helping resolve the problems of the disadvantaged in Denver.

Within this area only 18% of the students are 20 years old or less, 14% are 21 to 25, 43% are 26 to 40, and 22% are 41 or older. As would be expected the large majority of these students are male and better than two-thirds of the enrollments in Trade and Industrial Education are part-time.

Seventy-three percent of these enrollments have a high school education or better, indicating that this program is not making its major impact on high school dropouts. It can also be seen that the poverty area accounts for 22% of the enrollments in Trade and Industrial Education, a disappointingly low proportion since this is one area of education which could provide the disadvantaged with an opportunity for occupational entry and advancement. Again, it can be seen that only 5% of the enrollments are from the Manual High School District. It should be noted that approximately half of the male enrollments at Emily Griffith are in the Trade and Industry area; however, 63% of those enrolled in Trade and Industrial Education attended high school outside of Denver, again suggesting that this program is not primarily meeting remedial needs of people who have grown up in Denver.

As might be expected, 83% of those enrolled in Trade and Industrial Education list "getting a job" or "job advancement" as their reason for attending class. It should be noted that the two minority groups account for 28% of the enrollment in Trade and Industrial Education, with Spanish surname accounting for 20%, and Negroes accounting for 8%. Twenty-three percent of all Negro enrollments in Emily Griffith are accounted for by Trade and Industrial, while 20% of all Spanish surname enrollments are in Trade and Industrial Education.

#### Non-Health MDTA

MDTA enrollment, exclusive of those in health occupation education programs, accounts for only 1% of the total for the Opportunity School. The highest concentration for Non-health MDTA is in the poverty districts of North, West, and Manual High Schools. These three districts account for 46% of total enrollment and 60% of enrollments for students living in Denver. Twenty-two percent of those enrolled are from outside the City of Denver. It must be pointed out, however, that the absolute numbers of people reported in this Study for Non-health MDTA program is quite small, only 46 students in the three high school poverty districts. It can also be seen that the people of Spanish surname account for 47% of the total enrollments in Non-Health MDTA, whites account for 31%, and Negroes for 18%. It should be mentioned that

MDTA, as a federally supported program, cannot be compared directly to other programs in the school. Students for MDTA classes are selected on the basis of need, unemployment, etc., and therefore represent a different group.

### Health Occupations Education

Health Occupations Education programs account for 4% of the total enrollment in Emily Griffith. It should be noted that 55% of those enrolled in health MDTA programs were 25 years old or younger, suggesting that this program has a higher appeal to younger students than do those discussed above. It should also be noted that 60% of these students are involved in full-time study, 93% have a high school education or better, and 22% come from the three high school districts defined as poverty areas. Apparently this program is serving a need in the East High School District which accounts for 23% of the enrollment in this program. As would be expected, 88% of those enrolled in these programs claim job entry or job advancement as a reason for taking the course. The distribution of students enrolled in this program by race shows that the program is serving primarily the white population which accounts for 77% of the enrollments. Negro enrollment accounts for 13% and Spanish surname for 9%.

Several conclusions have been drawn regarding the Emily Griffith School. Some of these are based on data discussed in this chapter, others are based on interviews and discussions with school officials and others interested in the educational problems of Denver.

Existing facilities at Emily Griffith are at present getting relatively full utilization. Day enrollment is more typically avocational while occupational preparation accounts for the majority of the night enrollment. Reduction in avocational offerings during the day cannot be expected to be replaced with occupational programs unless special efforts are made to attract students. Future planning for facilities should take into account that the fullest utilization of these facilities will be realized only if they are used for occupational training at several levels. This is particularly important in many areas of occupational training where equipping a laboratory is very expensive and where the degree of specialization of the equipment renders that laboratory almost useless for training in any other field.

There is a strong feeling among the staff at Emily Griffith that there should not be an attempt to provide the same training for high school age youth

and adults in the same class. This position is felt to be well justified since differences in age produce problems which detract considerably from an optimal learning environment. Metropolitan Youth Center as discussed earlier was conceived for the purpose of serving high school dropouts. The success with which the Metro Youth Center has met clearly demonstrates the existence of a need by these students. The continued operation of such classes in these two institutions on a separate basis is strongly recommended.

An expansion of the cooperative education program appears to be one of the most promising prospects for dealing with the needs of the underprivileged in Denver. The success with which the Distributive Education program in Manual High School has met supports this as does continued rate of growth which has characterized cooperative education throughout the country.

The community centers operated by the Emily Griffith School were found in this Survey to be primarily avocational. The concept of these centers as being occupationally related does not at present appear to have been realized. While the avocational offerings in a center of this sort are extremely important in their own right and may provide an interest in and contact for occupational programs they do not in themselves meet the needs of preparing people for employment. The programs currently in operation in these centers are essentially no different than those in home economics courses found in the other adult classes.

In the preceding discussion it has been made apparent that the Opportunity School is to a large extent serving individuals from outside the city of Denver. However, one cannot treat the City of Denver as an isolated community. Other recently developed educational institutions, particularly the Community College of Denver, have as their major responsibility serving the entire geographic area. The point to be emphasized here is that the unmet needs within the City of Denver are so great that a heavier concentration of these needs by all responsible agencies is essential.

It should also be mentioned that the MDTA and certain of the other occupational education programs are to an extent reimbursed through federal and state funds. These are, therefore, meeting a need that exists in the City of Denver at a relatively lower cost to the local taxpayers, and they should be expanded in the future.

The total vocational, adult, and post high school educational picture in the City of Denver is in a state of transition with the advent of the

Community College of Denver, Metropolitan State College, Metro Youth Centers, and vocational offerings in the high schools. All of these developments involve activities that overlap the programs and role that has been almost the exclusive concern (except the formal higher education credit classes) of the Emily Griffith school. A comprehensive reevaluation of the basic role and programs at the Opportunity School in light of the total educational developments is not only necessary but unavoidable.



## CHAPTER V

### DEVELOPMENT OF THE CONCEPTUAL PLAN

The challenge in developing a conceptual plan for a total educational system to meet the needs of all people at all age levels is complicated by the multiple and interacting considerations across a number of major variables. These variables include considerations of basic purposes of the program, the age levels of the persons to be served, requirements for both general and specialized facilities, administrative agencies such as school boards, out-of-school agencies such as labor groups and ethnic associations, the level of content and experiences required, staff requirements at the various levels, and the governmental units responsible for administration and finance. No single developmental theme can be applied across all of the above components to provide simplicity. Each must be considered in light of all of the others.

The development of any overall model must give attention to prior developments and the existing situation. Further, modifications in light of specific needs, desires, and resources of the community must be given consideration. However, existing policies and structures cannot be permitted to influence unduly the development of overall goals for establishing and improving a long range plan. The resulting program must operate as a well articulated system to provide a high quality program at all levels.

Several principles and guidelines have been used in developing the components of a conceptual plan and recommendations. They include:

Maximum utilization of resources for educational purposes must be achieved in designing a comprehensive plan to meet the needs of all citizens of Denver through the schools of the community. Duplication and competition between programs are both unnecessary and unacceptable in light of limited available resources and extensive unmet needs.

A comprehensive program at all levels, for all age groups must be available with relative ease of access to each citizen. Availability must be provided in spite of difficulties due



to financial limitations, transportation, educational background, and restrictions in the life of the individual such as his employment situation. Genuine opportunity does not exist simply because the programs are offered at a specific location within the community.

An action program designed to contact individuals in need of services must be in operation to gain their participation. The passive approach, whereby programs were offered in response to requests, has not been successful in attracting significant numbers of many groups.

Decisions concerning the number, size, and location of programs must be guided by the degree to which the program is designed for specialization. The higher the degree of specialization, the larger the potential student population base required to initiate and operate that program. An elementary school program can be based on a relatively small neighborhood, whereas a comprehensive secondary school would require a much larger neighborhood, certain specialized programs will require the entire city and may include surrounding areas as the population base. This principle is particularly appropriate in guiding the planning of specialized occupational preparation programs for the post-high school and adult student population.

A contrary consideration is that each high school, or similar unit, must be developed with the maximum degree of comprehensiveness permitted by the total student population to be served. The degree of comprehensiveness and the particular programs offered within the school will differ from high school to high school according to the needs of the students.

No individual high school in Denver has an adequate population base to offer all of the specialized programs that should be available to their students. Consequently, there will be a need for provisions whereby students from any individual high school may attend the desired program of his choice at some location.

The most highly specialized programs offered for secondary students can most economically and effectively be offered in an "area" type of secondary center. The alternate possibility of locating selected specialized activities in each of the local high schools would require a complete transportation system among all schools. Scheduling complications and reduced utilizations of facilities and staff have generally resulted when this alternative was used in other cities.

Efficient and comprehensive planning must provide for cooperative programs in the specialized areas among adjoining school districts. Although Denver may have an adequate population base for the most specialized programs within the city, joint planning and offerings can be more economical and efficient if the total area is concerned to gain advantage of economy in size, transportation, and community exchange.

#### Structure of a Comprehensive Education System

The entire educational program for a city and surrounding areas must be conceived as one coordinated system. Equal educational opportunity for all potential students, in school and out, is both a goal and guiding principle. Included in the system must be provision for all levels and purposes. For purposes of organization and discussion in this Survey, activities and programs will be arbitrarily divided into 1) comprehensive in-school programs and 2) adult education. In-school programs include all levels from elementary and junior high school, secondary schools, community colleges and baccalaureate degree granting institutions. Adult education programs are those which serve

persons who have completed high school or are beyond the high school completion age and may participate in organized educational activities on a part-time or incidental basis for any purpose and at any level.

### Public Comprehensive In-School Programs

In a comprehensive public school program considerations must be devoted to both the level of education, that is, elementary, junior high school and secondary, as well as to system-wide services and activities. Within the system-wide activities are included programs such as special education of the handicapped, guidance activities (both general and vocational), instructional resources including educational television and instructional media, pupil personnel services and record keeping and the necessary administrative requirements of budgeting, finance and personnel.

#### Elementary and Junior High School, Level I

The elementary education level, which provides basic education and early guidance services, is not of particular concern in this Survey. However, in the comprehensive system, resource materials must be made available to the elementary level programs to gain appropriate concepts of work and leisure which would include the idea of occupational selection and requirements. At the junior high school level, student abilities, interests and needs become more differentiated and, consequently, a more broadly based program is required. Common learning experiences at this level are still greater than specialization, however. So far as the conceptual plan for occupational exploration and preparation is concerned, it is essential that the occupational exploration activities and guidance be included for all students.

#### Secondary, Level II

At the secondary level, grades ten, eleven, and twelve, the expanding range of needs, interests and abilities require multiple types of programs. The most common, and the foundation of all secondary education, should be based on a comprehensive high school or schools. Within each school, there must be full programs for general education, guidance activities, occupational exploration and try-out, and occupational preparation in several areas. College

preparatory programs and community college preparatory programs leading to both the less-than-baccalaureate degree transfer and occupational preparation programs must be provided. In addition, two types of special facilities, each serving a different kind of need, are necessary in a comprehensive plan. The "area" specialized high school facility enrolls students from all other local comprehensive high schools on a part-time basis and provides those programs not available in their "home" high school. This facility is structured around the offering of programs. The second type of specialized facility is designed to serve students with needs differing to a degree that they cannot be adequately met in either the comprehensive local high school or the specialized area facility. The Metro Youth Centers are an example of this type.

### Community College, Level III

Less than baccalaureate level programs offered by this institution will include those liberal arts and pre-professional transfer programs as well as vocational level programs. These vocational programs may be at the same level as offered in the comprehensive local high school or the area specialized center. At the other end of the range are high level technical and transfer programs requiring content clearly at the college level. Offerings may be structured for a short-time or for a full three-year organized program. Most commonly, the enrollment is in one or two-year programs and a high percentage of the total enrollment will be on a part-time basis and structured for occupational improvement and advancement.

### Baccalaureate Degree Institution, Level IV

Such institutions may offer the full four year and above of academic college-credit courses and programs for both liberal arts and occupational purposes, or they may restrict their offerings to only the upper-level, junior and senior, courses. To the extent that the four-year institution offers the first two years of transfer courses and less than baccalaureate occupational courses and programs, the community college and four-year institution are potentially in competition.

### Adult Education

Adult education is a generic term used to describe organized learning experiences by those persons who have left the regular in-school program. The level of programs overlap the entire range described above and may be offered by any one of the three educational agencies responsible for comprehensive in-school programs. The purpose of adult education also overlaps all purposes included in the programs at the above four levels.

An effective adult education program contains some requirements in addition to those of the in-school programs. One is a dynamic, action program to reach individuals who may not be aware of or who are not participating in programs which would be to their benefit. Recruitment and contact throughout the community for program development must be initiated and maintained to provide the benefits of the adult program to the community. Additionally, the programs must be made available at a time and location which will meet the convenience and requirements of those to be served. In meeting these needs, programs will very often be operated at locations in selected neighborhoods. Such programs may include provisions for childcare and other need supporting services to gain the participation of the adults. Neighborhood locations and activities can gain the contact and involvement of neighborhood groups and individual family members who can then be effective in reaching other potential students. Participation of parents in such programs can be an effective means of influencing the young members of the family and neighborhood to continue participation in the regular in-school programs. In most cases, it has been found to be necessary to have different attendance centers for the adults and the regular in-school students.

Since many of the facilities required in the adult programs will also be available in the in-school programs, joint, cooperative and exchange operations must be utilized. Since the largest enrollment in adult programs takes place outside normal school hours, all facilities of the elementary, junior high, secondary, and post-high schools should be utilized to gain economic advantage and program identity across the entire system.



## Coordination Among Educational Agencies

Within recent years two major developments in occupational and higher education have been initiated in the City of Denver and the surrounding area. Metro State College, a four-year degree granting institution, and the Denver Community College have been established and are in the developmental stages. In addition, the University of Colorado Extension Center and the Emily Griffith Opportunity School were already engaged in a number of activities overlapping the newly proposed programs. At the present time the various institutions are not following and do not have adequate operational plans and policies to initiate a well coordinated and efficient educational program at the most economical level. Joint meetings, discussions, and other activities at all levels across the various institutions have been held. There is an increasing interest in attention to coordination of programs.

As mentioned above there will be no surplus of financial resources available for support of education. Only the most efficient planning and utilization of resources will provide comprehensive programs at all levels for all citizens. There is a primary obligation at each level of government to see that funds within its jurisdiction are used with the greatest efficiency. In the Denver area, this is interpreted to mean that the major responsibility for establishing the principles, structure, and requirements for the total coordinated education system rests at the state level. This is particularly true since the primary support for Metropolitan State College and the Denver Community College comes through legislative action at the state level. Furthermore, the Board of Community Colleges and Occupational Education, in addition to having direct administrative control over the Denver Community College, provides reimbursement for occupational education wherever it is offered. In this instance, both Metropolitan State College and the Denver Public Schools receive such reimbursement.

Metropolitan State College was charged with the responsibility to offer occupational preparation programs at the less-than-baccalaureate degree level. Selected programs have been initiated. Requirements for technical laboratories associated with certain of the occupational programs were not available in the temporary structures, and, therefore, contractual arrangements were made for them to be offered at Emily Griffith Opportunity School, as provided in the original legislation.



The Denver Community College's primary charge is the offering of pre-professional and liberal arts courses for transfer purposes, adult education (particularly in the vocational and technical areas) and programs which require two years or less to complete. This charge provided a situation where the Community College, Metropolitan State College, and the Emily Griffith School are attempting, in several cases, to offer identical programs to the same people and to utilize the same on-the-job related facilities in the same institutions. Apparently, in the planning and the location of the community college campuses, the programs at Emily Griffith were considered and decisions were made to locate the community college campuses at other areas outside the City of Denver where such services were not available.

Many of the programs presently available at the Emily Griffith school are in the proposed course offerings of the Community College as recorded in a memo of February 22, 1968. These will include related instruction for apprenticeship training programs, drafting, automotive mechanics, electronics, commercial driving, and a number of programs in the health science area. Since the majority of students are high school graduates and above 20 years of age this would appear to be the potential student population appropriate for junior college type programs.

Other materials and discussions concerning the Community College program revealed tentative plans essentially to duplicate and extend the offerings now available at the Griffith School in each of their campus locations. The only omissions would be the programs for high school students, a relatively small group, and possibly the avocational programs. However, most community colleges offer a wide-range of vocational courses, and they would be a necessary part of any comprehensive program.

It is commendable that the Community College is utilizing its limited resources to provide programs in areas where they are not presently available. Funding is inadequate to initiate broad offerings at this time. The result is that the Griffith School is serving a purpose and role very similar to the Community College campuses, except for awarding college credit.

A major difference is in the financial support; the Community College is supported by state funds while Denver residents support both the Griffith School and the Community College through state taxes. At the present levels

of funding and operation, if the Griffith School was to be transferred to the Community College without cost, the current annual budget of the Denver Community College could operate the Griffith School for less than a half year. However, the Denver Public Schools could transfer the Griffith School to the Community College, pay all tuition for Denver residents and realize a savings sufficient to initiate the first steps of an occupational preparation program in the secondary schools.

It is quite clear that significant efforts must be made to plan a coordinated and complete program among the various institutions and agencies if they are to realize 1) proper use of financial resources, 2) a full range of programs available in all locations and to all groups needing services, 3) a minimum of duplication and competition, and 4) reduced confusion among the public. Several questions and possible alternatives will need to receive attention:

1. Which agency will provide the college transfer courses for freshmen and sophomore years?

Both the Community College and Metropolitan State College, or,

Denver Community College could be responsible for practically all college level work for the first two years and Metro State could concentrate on upper division offerings. The Community College, through multi-campus locations can be effective in this area.

2. Which agency can best offer the regular post-high school occupational programs?

At present, at least four different agencies are involved: Emily Griffith, Denver Community College, Metropolitan State College, and a future technical institute in the inner city which is being discussed as a part of the Model City development.

No additional educational institution, including a technical institute in the Model Cities program, should be established until and unless it is a part of an existing or modified agency, and it has a clearly defined role in the total plan of education for the area.

When the Denver Community College is adequately financed, it should be assigned the primary responsibility for offering the adult and two-year-and-less occupational preparation programs and a proper balance of programs at those locations.

3. Which agency should provide the specialized "area" high school and other special facilities for high school age youth?

The Denver Public Schools have the major responsibility for all students through high school completion or approximately the 17 year age level. They should have a fully comprehensive program and provide occupational exploration and preparation programs within the public schools.

Specialized facilities for high school students and students through the high school age are a requirement of a comprehensive system. It was recommended in the MERI report that area vocational schools be established under the administrative control of the community colleges. Under this plan those high schools would sell services in the field of occupational education to the public high schools to supplement their existing programs.

While such an approach might be the best solution in an area where the population base is insufficient to justify the investment in the necessary facilities, such is not the case in Denver. The need for occupational training within the City is such that the establishment of specialized educational centers, as well as comprehensive programs in all high schools, is fully justified. Furthermore, such programs should be an integral part of the Denver Public Schools to provide for the greatest coordination within occupationally oriented programs and to provide for the integration of occupational and general education.

4. Which agency or combination of agencies should administer and finance the adult education program for persons above high school completion or age?

At present the Griffith School and the Community College are in direct competition. This competition will increase as the Community College develops. Both the Community College and the Denver Public Schools could operate adult programs under a coordinated plan and financing. Programs for adults above the high school age level or high school completion, whether offered for basic education, high school completion, or at all levels above, could be the responsibility of the Community College.

If the junior college had full responsibility for all adult education and post-high school occupational preparation, they would need to utilize, under contract or exchange funds, the facilities of the public school system. Since the largest enrollment in the occupational programs are part time people, particularly in the evening, it would be unnecessary to build large enough facilities in the junior college locations and campuses to serve this larger group. The high schools and other schools have facilities appropriate for many such classes and programs that could be available during non-school hours. Such an arrangement would tend to provide the opportunity for offering classes in many locations closer to the needs of the residents. In addition, it would make maximum use of the equipment and facilities. Teaching staff of the Denver Public Schools in the occupational and other programs could also participate on a part-time basis with a junior college program. Also, under such an arrangement the Griffith School should become a campus or branch of the Community College.

#### Review of Selected Denver Public School Activities

A review of selected activities within the Denver Public Schools is appropriate to provide a basis for evaluating changes implied from the Conceptual Plan and Recommendations.

Meeting the Needs of All Denver Youth Through  
the Secondary School Programs

As has been pointed out elsewhere in this Survey, the Denver Secondary Schools offer a relatively traditional college preparatory program and very little in the way of occupational exploration and preparation. Obtaining a valid estimate of the extent to which the Denver Public High Schools retain all youth of high school age and an accurate follow-up of the numbers and future of the drop-outs and graduates proved to be impossible from the available data. General estimates from available data and judgments by knowledgeable people in the school system and community were used in making the following evaluation.

In general, the impression among a large segment of the Denver population is that the high schools are serving all youth. The subject of the percentage of drop-out or non-high school completion is a sensitive area. The public schools' office, the State Department of Education, and other reports give different estimates of the number and percentage of drop-outs. A direct request for such data to the personnel office of the Denver Public School provided only the data reported by the State Department of Education based on Denver reports. Responsible personnel in the Denver Public School Administration felt strongly that the ratios reported by the State Department office were high. This may very likely be true. A major point of discrepancy concerns the number of students who transfer from school to school and in fact do not leave the schools.

A large segment of either data includes a category of unknowns. Differing estimates of the nature of the unknown category provide a basis for different interpretations. For the 1966-67 school year, and based on the end-of-year membership, the State Department of Education estimates that the drop-out rate in grades ten through twelve is approximately 39%. By high school, the drop-out rate was reported as: Lincoln 36%, East 46%, Washington 14%, Manual 67%, North 47%, South 38%, West 55%, Kennedy 9%, and Jefferson 9%. The essential point to be made is not whether the city-wide tenth through twelfth grade drop-out rate is 39% or some percentage above or below this figure. Everyone agrees that it is significantly higher than it should be and it is probably higher than any other district in the State.



Other reference data help to give perspective to the drop-out rates from the high schools. The fact that 48% of the total population 25 years and above have not completed high school is not particularly surprising since it includes many older people whose high school completion rate is low. The very high enrollments found at the Metro Youth Centers for young high school drop-outs is an indication of a significant group of people who have an interest in completing their high school diploma but have chosen not to attend the regular schools. Additional enrollments in the high school programs at Emily Griffith add to the estimate of the size of this overall group. The evening high school program at Griffith has been relatively stable at approximately 700 for recent years while Metro Youth Center attracted a large new enrollment.

Just as the large total enrollments at Emily Griffith School have tended to mask the true picture of the availability of occupational preparation programs for the City of Denver, the triennial evaluation studies have tended to mask the true picture of the number and percent of all high school age students served. In interviews when the question was asked about the availability and extent of vocational education in Denver, references were almost always made to the Griffith School. The impression was given that broad scale offerings were provided to all persons. The impression is correct so far as adults are concerned, whereas it is entirely in error with reference to the secondary school students. Similarly, when questions were asked of the administrative personnel in the Denver Public Schools or the citizens concerning the follow-up of the high school students, the triennial evaluation

An outside example of a report which tends to mask the extent of vocational education in the Denver schools is a paper presented at the annual meeting of the North Central Association in April of 1967. In this paper, the implication is, that according to Mr. Keller's definition, comprehensive high schools exist in the Denver Public Schools. In this definition, Mr. Keller specifies that a comprehensive high school must serve the needs of all American youth. Included in such a program would be .... "programs to qualify the non-college bound youth and, as far as is possible, the boy or girl who will drop out before graduation, for an occupation." In support of his reference to Denver high schools as being



comprehensive, the presenter cites the widely dispersed and limited number and size, pilot program in business education, industry and home service occupations, electrical fundamentals, and basic general metals. While Denver is initiating small pilot projects in these areas, many cities have initiated complete programs through the entire school system.

In the 1966 Evaluation Study of the 1965 high school graduates who entered college, the data show that 2,913 of the 5,077 graduates entered college in the fall of 1965. This represents 57% of the total high school graduates. These data are impressive when taken alone. Later in the same report, Table V, reveals that 801 or 27% of the total did not complete their college freshman year. It must also be noted that the 57% of the graduates who entered college represents only approximately 30% of the total age group who should have graduated from high school in Denver that year. An additional calculation reveals that somewhat over 21% of the total age group of the City of Denver completed the first year of college.

The 1967 Evaluation Study of the 1965 high school graduates in business and industry includes only 668 cases. This amounts to 18% of the girls and 8% of the boys in the graduating class for a total coverage of 13% of the graduates. This percentage would represent only 5% of the total age group that should have completed high school during that year. In general, studies have found a much greater difficulty in gaining responses from non-college high school students, graduates, or drop-outs, than in gaining responses from those who enter college. Even such a restricted basis of follow-up of the non-college group provides some valuable insights to the future of this group. Fifty-five percent of the employers responded that they would have no openings for non-high school graduates whereas less than half as many indicated no openings for high school graduates. Further, the 267 Denver businesses and industries responding to the questionnaire indicated that the majority of jobs open to non-graduates would be in the unskilled, personal service and clerical-stockroom areas. The largest employment categories for the 1965 high school graduates were in the retail sales, manufacturing, food processing, and insurance and banking.

The third component of the triennial study is an attempt to gain views of the citizens of Denver concerning their public school programs. In general, these views have been quite favorable. However, it should be noted that opinions and responses concerning vocational education and opportunity for

vocational preparation within the high schools had been omitted from the surveys until the most recent one, which was not available at the time of this report. If the interviews and discussions held as a part of this Survey are reflective of the opinion of the citizens of Denver, the current opinion study should show a high and increasing interest in vocational education. This opinion would be further supported by requests and encouragement to expand such programs in the high schools.

Estimate of the Number of Students Being Served and Not Served.

Table 2, is a composite of data and estimates from the Fifty-Fourth Statistical Report, Denver Public Schools 1966-67; population data from the CAMPS and other reports, census reports, and other unpublished reports and releases of the Denver Public Schools. The data for number of graduates, average attendance, college entry and completion of first year are excerpted from the official reports of the public schools. Estimates of the total age group and comparison of those in school with the total age group must be accepted as estimates from the population and other sources.

End-of-year enrollments reported by the State Department of Education for the Denver Public Schools tend to confirm a high level of school leaving. Total enrollment in the senior high school was 18,947; by grade, the enrollments were: tenth 6394, eleventh 5544, twelfth 5009, and special secondary 782. A decline in enrollment across the age levels was the opposite of that which would be expected from gross census data.

The Denver Public School's Fifty-Fourth Statistical Report, page 24, shows the following for the secondary schools during the 1966-67 school year:

Transfers to other schools .....	2460
Drop-outs or termination:	
Deaths .....	10
Commitment to institutions .....	80
Prolonged illness .....	127
Married.....	136
Non-adjustment ... ..	1754
Employment .....	360
Military .....	151
Other .....	268
No trace .....	<u>225</u>
Total .....	3111

**TABLE 3**  
**ESTIMATES OF EDUCATIONAL PARTICIPATION**  
**BY THE HIGH SCHOOL GRADUATING AGE GROUP**  
**for the 1966-67 School Year**

Total 18 year olds in Denver projected from census data .....	9400	
Average daily attendance reported for grade 12:		
(DPS) .....	4798	
Correction for estimated absentees .....	400	
Estimated special secondary students .....	122	
Estimated parochial and private enrollment .....	800	
Sub-total .....	6120	6120
Total age group in school programs .....		3280
End-of-year, grade 12 membership		
reported (Colo. State Dept. of Educ.....)	5009	
High School graduates 1967, (DPS)*.....	5043	
Private School graduates .....	700	
Total non-high school graduates in age group .....		3657
Number entering college, using 57% from 1965		
DPS graduate follow-up .....		3252
Total age group percentage .....		34.6%
Number of age group not in college and in need		
of occupational competency for employment:		
	Number:	Percent of age
High School graduates .....	2491	Group: 26%
Non-high school graduates .....	3657	39
College drop-outs during first year .....	880	9
Total .....	7028	75%

\*Includes summer school, TV, and Metropolitan Youth Center for Summer of 1966 and 49 from the Opportunity School.

Drop-outs and terminations, excluding deaths, were equal to 18.3% of the total senior high school average daily attendance of 16,892 which includes 446 in the evening high school program. The total number of drop-outs and terminations is almost one-third larger than the average daily attendance at the largest high school. If a significant number did not re-enter high school, this rate would exceed 50% of all students over a three year period.

### Guidance and Counseling

#### Present Denver Program:

A guidance and counseling program in operation within the Denver Public Schools at the time of this Survey received more comment from the Consultant Team, teachers within the system, and citizens, including spokesmen of various community action groups, than any other single area. In general, there appeared to be the feeling that a highly adequate program of counseling for the college-bound student was in operation. Guidance and counseling activities for the non-college bound were oriented through a career counselor program and were completely adequate. The existing structure of having essentially three independent organizations and types of counselors seems to be a relatively unique and undersirable arrangement. A coordinated and integrated counseling program from the elementary schools through occupational preparation and placement is indispensable and a most essential component of a complete system of education. Although there are a number of well qualified and interested counselors within the Denver school system, the existing structure and procedures seemed to interfere with the desired level of student interaction and benefit. Each student needs to be able to obtain contact with and assistance from the guidance services with the utmost ease and availability. In effect, the student had to decide which type of program he should pursue before he could identify the appropriate counselor to contact.

The Career Counselors appear to be making major efforts in meeting the needs of the student group of their contact. The broad contact and relationships of program planning, cooperation with the Colorado State Employment Service, liaison with the Emily Griffith Opportunity School for the cooperative students and placement of students in part-time jobs include many elements necessary for this group of students. However, the individual student should be in a position to explore the total range of programs and career possibilities with a single contact with a counselor.

The one semester "vocations" course offered during the tenth grade and taught partially by counseling personnel is misleading in title and operation. In practice, six weeks of driver education theory, administration of guidance tests, and other general topics seem to be assembled under this title. A program, possibly structured in one course as suggested elsewhere in this report, where students could explore the broad world of work and selected fields of occupations across all levels is essential in our rapidly developing and complex society. The activities conducted within the vocations course do not appear to be meeting this type of objective.

Driver education and scheduled sessions for administering standardized tests for guidance purposes are important components of a total educational program. It is questionable, however, whether such a collection of activities can be effectively handled in the one semester course as presently operated and, in addition, achieve any measure of occupational exploration. Several members of the counseling staff were in agreement with this position and were most interested in developing a different, coordinated approach for all students.

#### Proposed Guidance and Exploration Program

Early introduction to the concepts and ideas of the world of work and occupational choice is the foundation for a successful adult work life. Acquaintance with and understanding of the broad world of work can only be developed over a long period of time. Initial concepts of work and leisure and obtaining the proper background and preparation for entry into a selected field or occupation must be given systematic and careful attention from the elementary school level. Donald Super, a leader in the field of vocational guidance, has found that it is most important that a student, by the time he reaches the ninth grade, be aware that he will have to make an occupational choice and understand some of the major considerations relevant to making that choice. A specific choice of occupation can be delayed for a short time.

With the broad responsibilities and requirements presently expected of the elementary teacher, she typically cannot be expected to present an adequate program without major assistance. Provision of resource materials that may be made available as a part of the regular social studies and language arts areas in the upper-elementary years can be most effective. The use of educational television, closed or open circuit, can bring experiences within the neighborhood and the City of Denver into the classroom and both broaden the experiences



of the individual and assist him in developing an orientation to his total occupational future. Such experiences are relatively more important for students with a limited area of travel and acquaintanceship. However, they are highly important regardless of the future educational program or occupational level of any individual student.

Preferably at the eighth grade and certainly no later than the ninth grade a formal program of occupational information and exploration for guidance purposes should be initiated. Such a program could be initiated whereby a first semester course, organized to explore at a general level, all of the major occupational fields, could be offered. The breadth of the fields would be at a level of the business field, the manufacturing field, transportation field, construction and related fields, arts and entertainment, health and medical fields, public and governmental fields, etc. All levels of occupations within the fields would be covered. Not only would the broad fields be explored but the major components or segments of these fields would be given attention as specialty areas. Broad concepts of the nature and role of occupations would be developed. Further investigation in broad fields, a sub-area and selected occupations within a field would be pursued by individuals for his own acquaintance and information. Extensive resource units of materials would have to be developed to view reality and acquaintance in this program. Educational television, film loops, field trips, visiting speakers, and other media and techniques would be designed particularly for this experience program. Materials for such a program should be jointly developed by the guidance and counseling staff and the other teaching areas concerned, including the vocational and practical arts departments.

During the second semester of the same year, each student would select a given number of broad fields included in the first semester for greater in-depth exploration and try-out experiences. Selection of three fields for try-out would permit approximately six weeks of exploration in each of the three areas on a rotating basis. The instructional staff for this type of program must work in a close team approach where the backgrounds, specialties, and particular competencies of each can be brought to bear in a fully integrated experience focusing on the student's development.



## Occupational Exploration and Tryout

Occupational exploration across broad fields is equally as important for the student who intends to attend a post-high school program as for those who are least likely to pursue such programs. Occupational choice has been found to be a developmental process at each stage of decision making which is based on a combination of experiences and existing knowledges. In addition, it is clearly apparent that a high proportion of those who have the intent to pursue a college degree will not in fact enter such a program. A significant additional number will not complete such programs.

Although occupational exploration, try-out and preparation should be organized as a plan of experiences for all locations, the relative level and emphasis within the program will differ somewhat from location to location. The system-wide planning of offerings and supporting materials, to be made available to each location, would include appropriate supporting materials for all levels.

Occupational exploration of broad occupational fields and further exploration in selected sub-fields is necessary at no later than the ninth grade. The course activities would be integrated by the practical arts and guidance personnel. Exploratory activities on a try-out level in broad fields would take place at the tenth grade. Included would be the cluster concept rather than the specialized activities oriented to specific materials or processes. Included in the try-out experiences would be those associated with the business field (organized around central ideas or clusters such as the processing of business information and records), the entertainment field including music and the arts, broad manufacturing fields (such as in the metal working, electronics, plastics and synthetics areas). Other examples are: the applied biological sciences including both those related to agricultural and laboratory experiences; the health-service field including nursing, medical laboratory, x-ray, childcare and facilities, occupational and physical therapy; the construction industry; the power field including automotive trucking, small gas engines and fluid power.

Courses in each of these areas would be structured such that a person might take one semester or continue through a full year according to his own rate and interests. In addition to exploration of the broad areas, the facilities would be structured in a fashion that would permit additional practice and acquaintance with selected specialized activities.

The second level of exploration would follow with more specific try-out and acquaintance experiences. Involved at this level would be try-out experiences involving the acquisition of some proficiency in the skills that could be utilized for personal benefit. Beginning typing, bookkeeping, and notehand would be examples at this level in the business and office exploration area. General metals experiences including machine tools, sheetmetal, welding, and fabrication would be an example in the industrial field. In the home economics area, the first level would be oriented to explorations of the role of homemaking and family living with exploration activities in those areas that would be appropriate for all girls whether or not they became housewives or the dual role of homemaker and wage earner. Second level exploration would involve activities and experiences to gain a higher level of competency in consumer education and being a consumer, management activities of the home and family as well as out-of-home, wage-earning activities. Exploration of those occupations allied to the knowledges and skills commonly associated with the home economics areas would also be included. More in-depth experiences in the foods and clothing area would be designed to provide proficiency in these activities as it might be used for homemaking. Third level courses would be oriented to occupational preparation.

#### Occupational Preparation

Occupational preparation to at least an entry level competency should be the goal for each student before he leaves contact with the secondary school. Such preparation should be available at the junior level with increasing emphasis at the senior level. On an individual basis, especially to retain students in the school program and where the individual student may gain the greatest benefit, occupational preparation may be provided at an earlier age or grade, even in the junior high school. Occupational preparation programs in both a specific occupation and in a closely associated group of occupations should be provided. Examples include: auto mechanic, printing, office machine repair, stenography, sales, health service worker, key-punch and TAB equipment operator, etc. Occupational competency developed during high school may also provide a source of supporting income to make college attendance possible.

Initiation and extensive use of part-time cooperative education programs will require close coordination and exchange with individual businesses and industries. This regular contact and exchange will provide both the opportunity to revise and keep occupational preparation programs current and input information to the occupational exploration and guidance activities. To be successful, the cooperative program will need to be centered at each of the high school locations. In other cases programs will be sufficiently specialized so that students may be placed anywhere in the City. Close coordination between schools and among the coordinators at each school will be necessary to prevent multiple contacts with the same potential cooperating employers. Lack of coordination could result in an adverse reaction from the community.

The Denver Public Schools is one of the largest employers in the City. Many activities have a high potential value as training stations as a part of the part-time cooperative program. Utilization of the schools themselves provides examples of the support and commitment to this type of program.

The next step in occupational preparation is the placement activity. Close working relationships and exchange with the State Employment Service and other agencies can provide a smooth transition from the secondary program to employment. Regular contact between potential employers and the teaching staff will provide a much broader potential for assisting with placement of students. Part-time employment is an important aspect in retaining a number of students in high school attendance. Assistance with part-time placements and employment by school personnel can provide an element of coordination and considerations of desirability of the experiences for the students development. Career counselors assist to a degree in this type of activity at present but a more broadly based contact and coordination as a part of the total program needs to be developed.

The final and most important step is a continuous and active follow-up program to provide one element of continuous program evaluation.

#### Specialized Secondary Centers

Reference has been made in earlier sections to the need for specialized facilities to meet student needs on a system-wide basis. They are reviewed here for summary purposes.

### Metro Youth Center

The development of the Metro Youth Centers, as cited earlier, is to be commended and encouraged. Extension of such activities in cooperation with the joining school districts may very likely require establishment of additional centers. It appears appropriate that these centers be kept relatively small to retain the close contact and interchange between the staff and students.

### Specialized Area High School Center

The population and student base at each of the high schools, even though they have been expanded to become more truly comprehensive high schools, will not be sufficiently adequate to offer all programs that should be available to the high school students. The same principle will be true for a number of the academic or special interest areas as well as in the occupational preparation areas. Examples of the type of programs that may be offered in only a single location within the City would include: programs in the fluid power area, business data processing, industrial controls and systems, specialized fields in electronics, calculus, fourth year foreign language, applied biological sciences, and agriculturally related occupations such as horticultural and nursery work. In other cases the first level of the activity would be offered at each of the high schools and the more specialized second level would be offered at the specialized center.

### Use of High School Facilities

A preliminary review of present facilities and projected needs suggests that expansion at each of the present high schools will very likely be needed. Expansion and remodeling should be included provisions for an adequate occupational preparation program. Present facilities are not presently adequate for this type of program.

West High School meets the requirements of transportation and access, available adjacent space, size and many of the structured requirements to be converted to a specialized area secondary center. A new high school, generally west of West High School could be required for the students in that area and could reduce the amount of expansion at other schools, especially North and Lincoln.

### Emily Griffith School

The Griffith School is presently receiving relatively full utilization for essentially adult education on both a day and night basis. It is anticipated that such use will continue and, very likely, increase. It could be utilized by offering programs in cooperation with other agencies such as the Community College, MDTA, neighborhood groups, and with all other agencies. Additional programs designed and operated to more adequately reach those most in need of services should be undertaken.

Adult education is a system-wide program and would involve all schools, facilities, personnel and agencies. Some Griffith School personnel will have a more broad responsibility than for the School itself.

### Planning Considerations

Success of the overall plan will depend on many factors. High in importance is the development of a well understood, coordinated and planned sequence of experiences as part of obtaining adult occupational success. The program must develop a known and desirable image and identification but retain the flexibility to meet emerging and changing needs. It must be promoted and understood by the school, the students and the public. Equal opportunity and identical offerings at each high school are not equivalent. Although each high school will serve a region of the City involving a particular neighborhood and population each with different characteristics and combinations of characteristics, the number and type of program of each location will differ. However, each individual regardless of residence must have access with relative ease to a program some place in the total system most compatible with his abilities, interests, and plans. A commonality of purpose across all locations with appropriate goals, definitions, and programs is pre-requisite to orderly planning and program development. Commonality of titles and descriptions is necessary to permit identification by the students, citizens and other agencies cooperating in the total program



With a high level of mobility among school districts at all levels, each student needs to be able to continue through an orderly program. Commonalities in terminology and in the broad subject fields and with increasing specificity as the programs reach occupational competency can still provide for courses to be offered at a level and in a manner appropriate to the needs of each group of students.

Differential rates of learning will require differing lengths of time for groups to obtain similar educational objectives. In those schools and locations where the student population attains higher levels of competency in the supporting math and science areas, the occupational exploration and preparation in the same broad course area should take advantage of such competencies. Pre-engineering drawing and applied science are examples of such programs. In other cases where eleventh and twelfth grade students elected not to take mathematics courses, it will be necessary to offer applied science and mathematics courses for those students who find that they must obtain additional background to enter and be successful in technical programs at the upper high school or community level.



## Program Development and Implementation

### Administration

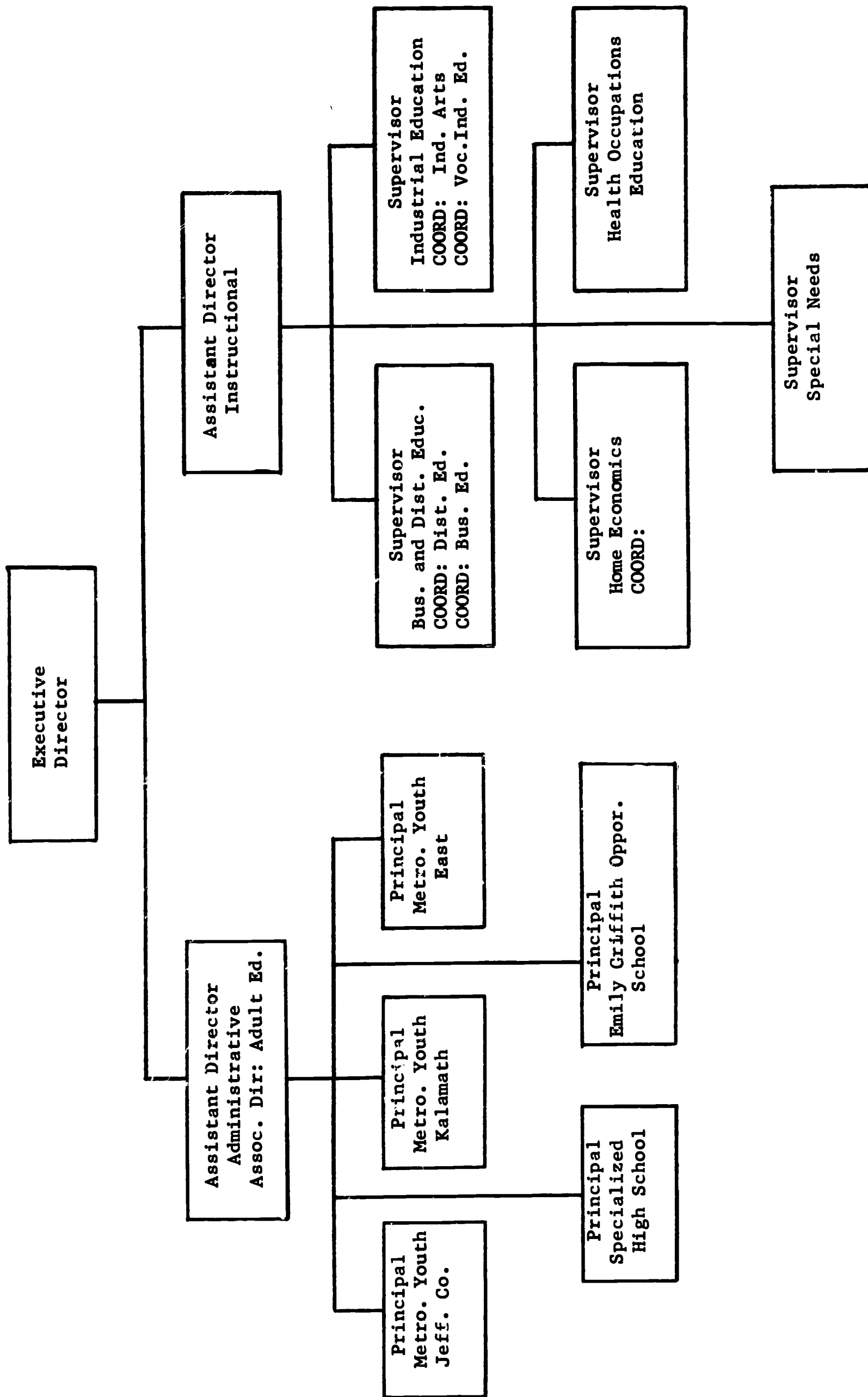
1. Structure - The entire focus of the structure and function of the administrative activities in the area of practical arts and vocational education, as in any other educational endeavor, is to make available a more adequate and higher quality educational program for the individual student. It must provide the leadership, resources, and coordinated planning to make it possible for the individual teacher to accomplish this objective. The freedom and flexibility as well as the authority and responsibility for direct program implementation and development must be focused as close to the teaching-learning situation as possible. Implementation of this principle requires that this responsibility be located at the individual school level and that within each school a person with responsibility be designated to facilitate and insure a fully articulated program across the guidance, practical arts, occupational exploration, and occupational preparation program, including the various specialty fields.

As the occupational exploration and preparation programs are initiated through the local schools, continuing and valuable contacts will be established with the businesses and industries of the district. Such contacts and exchange are valuable feedback systems for in-school and adult education activities. Consequently, close articulation between the regular in-school and the adult program oriented to that neighborhood can be facilitated by the system-wide coordination of in-school and out-of-school activities.

The present administrative structure was cited by all members of the Consultant Team as leaving much to be desired. All cited the present practice of electing a member of the teaching staff in each of the fields of industrial arts, home economics, and business as department chairman at each of the local high schools. No additional compensation or reduction in work load accompanied this additional responsibility. Consequently, the newest staff member was very often elected and those activities required to insure a quality educational program were not achieved. In addition, programs in each of the fields were operated as independent units. It is the unanimous recommendation of this group that the direct responsibility for program coordination and development be placed at the school principals level. Operationally, an assistant to the principal probably would be directly responsible for coordination across all the activities. Within each of the specialties, sufficient recognition and

CHART V

PROPOSED ORGANIZATIONAL PLAN FOR PRACTICAL ARTS  
VOCATIONAL AND ADULT EDUCATION



inducements would accompany the department chairmanship to attract the most capable individual. Such inducements could include a reduction in work load for a coordination of activities and possibly an additional pay increment. A proposed organizational plan which would help accomplish this is presented on page 81.

The proposed administrative plan is suggested to illustrate the type of operation required for an effective program. This structure, or some modification of it, should be used in light of other requirements and considerations within the system. In the proposed Conceptual Plan and this administrative structure the Emily Griffith Opportunity School, the specialized area high school, and the various Metro Youth Centers are conceived to be equivalent to other school locations. Responsibility for adult education has been placed with an assistant director. In the past Emily Griffith School and adult education have been almost synonymous. In the proposed plan, adult education in the Denver Public Schools would be a system-wide, coordinated activity carried out through each of the schools and other community centers.

The two major components of activities under the direction of the executive director are: 1) the operational programs division which is headed by an assistant director and includes the Metro Youth Centers, the specialized area high schools and the Emily Griffith School, and 2) the instructional programs division which is headed by an assistant director and includes a supervisor for each of the subject matter areas and one for special needs. Direction for the total adult education program is placed at the assistant director's level since it will be conducted throughout the school system and will utilize all facilities.

In the instructional programs division activities are of a consultant-leadership type for instructional activities throughout the system. This component is conceived to be a staff activity, with personnel in this section working as a team. Joint planning and exchange, coordination, and continuity would be required. Planning for program development, curriculum re-organization, development of resource units, in-service staff development, coordination of budgeting, and coordinating requisitions would be included within their area of responsibility. This team would be responsible for providing the leadership and development activities at all levels: junior high school, high school (exploration and occupational preparation), and in the adult programs across both the regular high schools and the specialized centers including Emily Griffith.

The combined areas of business and distributive education and industrial arts and trade and industrial education reflect the principle that if close articulation is to be obtained and if joint relationships are to exist at the local school level it must be in operation at the central administration level.

One possible alternate in the structure would be that a single person in the instructional services division be responsible for all junior and senior programs in a specific geographic region of the city. This responsibility would be for all programs regardless of the particular specialty of the supervisor. Such an arrangement would provide for readjustment of work load according to the needs of each area of the City. In addition, it would compel each person in the instructional division to become familiar with the activities across all specialties. Joint resources of specialists in each of the areas would be available among the total group.

Initial review of the structure may imply the creation of a number of positions. However, a closer inspection will reveal that the majority of positions already exist. For example, the associate director for adult education would be attached to the executive directors office rather than operating from the Emily Griffith School. A principal is required for each of the specialized centers as is now true. Consequently, only the assistant director for administration would be a newly created position. In the instructional services division, a supervisor for distributive education, business education, industrial arts, and home economics are now employed. The initiation of occupational programs in the trade and industrial area within the high schools will require a supervisor. Since this person will be the supervisor of this activity across all the regular high schools as well as specialized centers, an equivalent person for trade and industrial education is already employed within the Griffith School. A coordinator of health occupations is presently employed in the Griffith School and since the health occupations should be initiated in all schools this position should have a system-wide responsibility.

Therefore, again, only the assistant director for instructional services is a new position. It is recognized that if personnel are shifted to a more broad and expanded program other changes in assignment will be required. However, system-wide responsibilities should provide for better coordination in the most effective and efficient manner. The proposed organizational

plan can be implemented with the present structure of programs and can provide a base for effectiveness in any future re-organizations.

### Functions and Policies

#### A. Central Administration Functions

With the rapid expansion in funding programs focused on occupational education and other programs for disadvantaged and specialized groups in the occupational area, a significant amount of time is required to remain current with developments and to pursue funding possibilities. Development of proposals, contracts, and working agreements require an additional amount of time. A school system the size of Denver can obtain through various funding arrangements a return many times greater than the investment in adequate personnel. Development and continuation of occupational preparation programs will require that a favorable relationship be created with all concerned groups and that these groups be informed of the potential of such programs.

Also, the emergence of the community action groups and the Resident Advisory Committee associated with the Model Cities and other programs will require substantial time of the Executive Director. Many of the activities cannot be effectively delegated to other personnel.

From the foregoing, it can be concluded that at the central administration level several primary functions may be identified. They are:

1. Providing leadership, coordination, and resources on a systemwide basis.
2. Carrying out direct working relationships with federal, state, and other potential funding and cooperative agencies.
3. Contact and exchange between public and private agencies, associations, and interest groups.
4. Coordination of cooperative activities with other school districts such as Jefferson County Schools and the Community College of Denver.

#### B. Staff Development

Intensive, coordinated, and well articulated in-service staff development must be an essential part of any new direction for the Denver Public Schools. Actual program initiation must be implemented at the various locations by the staff and administrators directly concerned. The early stages would involve planning and developing programs with a select staff at locations to serve as demonstration centers. Experience gained by staff involvement could then be used to revise and extend programs to other locations.



Summer curriculum planning and development workshops within the school system should be carried out with the full involvement of system-wide administrative and supervisory specialists as well as outside consultants. A team approach to gain the broadest involvement of personnel and concepts would be essential.

Close involvement of both regular high school staff and teaching staff at Emily Griffith, who have more extensive background in the occupational areas, should be incorporated in all staff development activities. In addition, cooperation with business and industry to obtain an exchange of skilled workers should be investigated and implemented wherever possible. Involvement of personnel from businesses and industries in the curriculum planning can be most effective in preparing persons to meet employment requirements. It also provides the teaching staff with a more realistic understanding of the problems and requirements of potential employers.

Use of full-time teaching assistants is becoming well accepted in many systems. The use of persons with the technical competencies in the various specialized laboratories has particular advantage for occupationally oriented programs. Also, provisions for part-time cooperative programs for high school senior students working in the instructional programs of the schools can serve as a valuable educational experience as well as provide occupational exploration for the teaching profession.

Rapid developments in the potential of newer instructional media should be explored. Educational television, film loops, and programmed materials operated from central resource and distribution systems, as well as resource units within each location, will provide additional quality and flexibility in program offerings.

Provisions of the Education Professions Development Act and the proposed 1968 amendments to the Vocational Education Act, if funded by the Federal Congress, may provide significant support for the staff development activities. Whether or not such funds are available, the success of the re-organized program will depend on staff preparation and development on a continuing basis.



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**APPENDIX A**

**Summary of Inventory of Facilities and Offering by the  
Denver Public High Schools**

**Inventory Form and Directions..... A-1**

**Business Education..... A-5**

**Home Economic Education..... A-15**

**Industrial Education..... A-25**

**DENVER PUBLIC SCHOOLS**  
**School Facility and Enrollment Inventory**

School or  
 Location \_\_\_\_\_; Jr. Hi. \_\_\_\_\_; Sr. Hi \_\_\_\_\_; Special \_\_\_\_\_  
 Rm. or Lab. No. \_\_\_\_\_. Location (floor or other) \_\_\_\_\_  
 Length of class period \_\_\_\_\_. Designed for \_\_\_\_\_  
 Presently equipped as \_\_\_\_\_  
 Student capacity for quality program: From \_\_\_\_ to \_\_\_\_\_. (depending on use)  
 Equipment, check most descriptive:

Condition: excellent \_\_\_\_; good \_\_\_\_; fair \_\_\_\_; poor \_\_\_\_; \_\_\_\_\_  
 Extent: comprehensive \_\_\_\_; adequate \_\_\_\_; limited \_\_\_\_; \_\_\_\_\_  
 Occupational potential: Could an occupational program be offered in this  
 lab? Yes \_\_\_\_ No \_\_\_\_

If yes, what? \_\_\_\_\_

Comment: (Give other information that would be a strength or weakness)

\_\_\_\_\_

\_\_\_\_\_

1) Period 1	2)Total Enrolled	3)Ethnic Enrolled	4)Poten Occupation	+5)Student Potential	6) NOTES
Course: TITLE:	May 1,68 M ____ F ____	N ____ Sp ____ Wh ____ Ot ____	Ex ____ P.Sk ____ O.Re ____ Bg.Oc. ____ En. L ____  Name of Occ _____	1. ____ 2. ____ 3. ____ 4. ____	

1) Period 2	2)Total Enrolled	3)Ethnic Enrolled	4)Poten Occupation	5)Student Potential	6) NOTES
Course TITLE:	May 1,68 M ____ F ____	N ____ Sp ____ Wh ____ Ot ____	Ex ____ P.Sk ____ O.Re ____ Bg.Oc ____ En. L ____  Name of Occ _____	1. ____ 2. ____ 3. ____ 4. ____	

(Second and third sheets were available for each period of the day)

INSTRUCTIONS AND INTERPRETATIONS FOR  
School Facilities and Enrollment Inventory

**USE OF FACILITY BY PERIODS**

**Column 1: Course Title**

Record in the column the title of the course taught at the period indicated at that specific school. Use a separate and sequential block for each period of the day. The blocks are numbered by period. If the facility is vacant for a period, write vacant in the space for course title and go to the next period block. If a double period class meets in a given room, enter "same as above" for the second period and do not complete the rest of the block. If the facility is used for a non-practical arts class, enter "non-practical arts" and do not complete the rest of the block.

**Column 2: Total Enrollment**

Record enrollment by sex as of the first week of May. Record for each period. Record the number of each beside the M (male) and F (female). Use the best estimate by teacher if necessary.

**Column 3: Ethnic Enrollment**

Record the number of students from each ethnic group. It is not necessary to go to great deal or fine precision. The individual teacher can usually provide this information. Make a best estimate wherever necessary.

- 1) N - Negro
- 2) Sp - Spanish Surname
- 3) Wh - White
- 4) Ot - Other

**Column 4: Potential Occupational Value**

This scale is designated to obtain an estimate of the actual operation of the class in terms of the potential value it may have for a person in seeking employment at a later time. Record it as it is actually operating, not what it might have been at one time or what it could be. The individual teachers judgement is requested here.

Three items of information are requested. Use the most descriptive terms even though the situation will not be equally applicable for all students. Record the number and abbreviation only and write-in the occupation(s).

### OCCUPATIONALLY RELEVANT LEVEL

(1) Exploratory -- general education -- introductory information to a field or area and appropriate for all students regardless of future occupational choice. May have general background or understanding value or provide information helpful in vocational guidance and occupational choice but not presented as being appropriate primarily for those who may enter the occupational field.

(2) Personal use or skill development -- an intermediate approach with emphasis on developing competencies that are most appropriately used in the individuals own daily living even though they may be developed from and include quite a lot of information, principles, and procedures similar to that used in the business and industrial world.

Possible examples -- personal record keeping and budgeting or general metal working.

(3) Occupationally Related skill or content -- courses in this category may not involve direct skills used in an occupation but would be important, if not required, in becoming successful in an occupation. May be offered as a related instruction class such as in distributive education or applied math for draftsmen.

(4) Beginning Occupational skill development -- courses classified in this category would be those that may be offered as personal use or general education but would involve sufficient practice that it would be directly helpful in obtaining some jobs even though at a low level. Some students actually use it as an aid in obtaining employment.

(5) Advanced or job entry level occupational skill development -- courses classified in this category would be those that have sufficient depth and practice that they could be used as a direct base for beginning employment at some level even though the course may not have been structured toward specific employment or an specific occupation. A number of students successfully use it as a base for obtaining employment.

Examples: -- Architectural Drafting, Advanced Stenography

### Column 5: Student Potential

Use this scale to describe the students in each class. Use most descriptive code only. "Mixed" is to be used only when one of the other categories would be misleading. Focus is on the ability and not necessarily on the likelihood that they will attend a program at the level indicated.

(1) College bound -- to be used when most students have actual ability to be successful in entering and possibly completing a degree program.

(2) Post - H.S. - Assoc., Degree or Technical -- to be used when most of the students have the actula ability to be successful in entering and possibly completing a formal two-year post-high school program involving the appropriate sciences and mathematics.

(3) Average High School -- to be used when most students have about "average" high school ability and will likely seek employment upon leaving high school or possibly further training at a difficulty level approximately equal to high school -- generally skilled occupations.

(4) Low High School -- to be used when most students have difficulty with "regular" high school work or those who would best benefit from some modification in high school work. They will likely seek employment directly after leaving high school or with short-term or on-the-job training -- generally semi-skilled or lower.

Column 6: Notes

In brief but meaningful statements, indicate other information about the facility, equipment, students, or other features that would prove helpful in showing the situation as it exists in this class and period.

Examples might include:

- (a) beginning and advanced students mixed in class
- (b) special section for modified students
- (c) equipment too limited in range for this level
- (d) most students obtain employment as \_\_\_\_\_ after taking this class
- (e) class used mainly to permit seniors to get an extra credit



TABLE A-1

BUSINESS EDUCATION

	South	East	Lincoln	Manual	West	Jefferson	Washington	JFK	North
Male	301	196	286	115	138	199	219	184	211
Female	716	537	885	279	510	394	394	354	675
-----									
Negro	1	343	4	239	9	1	41	0	1
Spanish	40	76	161	111	280	2	11	15	301
White	973	503	1005	39	351	563	747	521	701
Other	0	9	1	5	3	1	1	2	2
-----									
College	2*	10*	1*	0	3*	6*	14*	1*	12*
Post H.S.	5*	11*	6*	0	5*	19*	13*	6*	8*
Adv. H.S.	9*	15*	7*	262	4*	0*	17*	7*	39*
Low H.S.	6*	5*	4*	11	2*	0*	1*	0*	0*
Mixed			8*		16*			8*	
-----									
TOTAL	1017	929	1171	394	648	599	803	538	1016
Classes	43	29	43	19	31	25	37	25	48

Total Business Enrollment:

Enrollment 6593  
Classes 300

NOTE: 1. Totals for male and female may not equal total enrollment due to missing data  
2.\* Indicates the number of times this level was checked by the instructors and not the number of students at that level.

# SOUTH HIGH SCHOOL - Business Education

## Facilities and Equipment:

<u>No. of Classes</u>	<u>No. of Classrooms</u>	<u>Vacant Periods</u>	<u>Type of Classrooms</u>
17	-	-	General Classrooms
26	3	1	Typing rooms

Equipment was generally in fair condition. Amount and kind of equipment in special laboratories is rated from limited to adequate for present offerings. However, stenography is taught in a regular classroom.

ENROLLMENT:	Female	Male	Female	Male
-------------	--------	------	--------	------

### Courses:

Typing I	43	61
Typing II	126	34
Typing III	87	10
Typing IV	53	3
Office Practice	7	
Office Practice I	38	2
Office Occup.	32	12
Transcribing I	9	1
Transcribing II	25	
Touch Steno	9	1
Steno II	48	19

### Courses:

Steno IV	13	
Advanced Steno.	12	
Business Math I	64	39
Business Math II	22	27
Business English	18	
Business Law	28	56
Bookkeeping I	16	4
Bookkeeping II	37	14
Notehand	24	6
Salesmanship	5	12

The total enrollment in Business Education at South High School was 1017, with the Ethnic enrollment consisting of Negro 1, Spanish 40, white 973, and other 0. Three were unaccounted for.

## Potential Occupational Value:

Exploratory - 10    Personal Skill - 22    Occup. Related - 9    Beg. Occup Skill - 48  
Advanced Occup. Skill 60

According to the instructors, for persons seeking employment in the future, the present classes provide potential value for the following occupations: stenographers, clerks, typists, and clerical.

## Student Potential:

The number of students was not given; numbers indicate only areas checked by the instructors. Several instructors indicated that their classes were mixed with different student potentials in each class.

College - 2    Post High School - 5    Advanced High School - 9    Low High School - 6

**EAST HIGH SCHOOL - Business Education****Facilities and Equipment:**

<u>No. of Classes</u>	<u>No. of Classrooms</u>	<u>Vacant Periods</u>	<u>Types of Classrooms</u>
18	3	-	General Classrooms
11	2	5	Typing Rooms

Two instructors felt that present typing desks need to be replaced; otherwise, equipment is generally in good condition. It is adequate for beginning level classes but limited for advanced level classes.

**ENROLLMENT:**                      Female      Male                      Female      Male

**Courses:**

Typing I	48	41
Typing II	100	20
Typing III	60	4
Typing IV	29	5
Office Practice	22	1
Office Occup.	34	4
Personal Short Hand	19	3
Transcribing II	19	

**Courses:**

Business Math I	29	24
Business Math II	31	22
Business Law	19	31
General Business II	15	21
Stenography II	48	
Stenography IV	19	
Bookkeeping I	25	9
Bookkeeping II	20	10

The total enrollment in Business Education at East High School was 929, with the Ethnic enrollment consisting of Negro 343, Spanish 75, white 503, and other 9.

**Potential Occupational Value:**

The number of students was not given by the instructors; figures given indicate only areas checked by the instructors.

Exploratory - 14    Personal Skill - 17    Occup. Related - 5    Beg. Occup. Skill - 14  
Advanced Occup. Skill - 4

According to the instructors, for persons seeking employment in the future, the present classes provide potential value for the following occupations: clerks, typists, and secretaries.

**Student Potential:**

The number of students was not given; numbers indicate only areas checked by instructors.

College - 10    Post High School - 11    Advanced High School - 15    Low High School - 5

## LINCOLN HIGH SCHOOL - Business Education

### Facilities and Equipment:

<u>No. of Classes</u>	<u>No. of Classrooms</u>	<u>Vacant Periods</u>	<u>Type of Classrooms</u>
15	-	-	General Classrooms
15	2	1	Typing Rooms
5	1	2	Bookkeeping Rooms
8	1	0	Office Practice

Instructors indicate that facilities are poor in some instances. One instructor indicated the need for additional floor space. Additionally, there is a need for additional equipment such as adding machines, printing calculators, transcribers, copy machines, electric typewriters, overhead projectors, stenographic laboratory equipment, and skill builders.

One instructor indicated that not enough transcription is offered because of the lack of typewriters. Others believe that reference materials should be set-up in the general classrooms. If only second-year student classes met in one room, material could be better utilized.

<u>ENROLLMENT:</u>		Female	Male			Female	Male
<u>Courses</u>				<u>Courses</u>			
Typing I	56	42		Bookkeeping II	22	4	
Typing II	133	50		Business Math I	38	22	
Typing III	135	15		Business Math II	25	20	
Typing IV	53	4		Business Law	33	32	
Transcribing II	19			General Business	17	14	
Personal Short Hand	23	4		Business Organ.			
Stenography II	78			and Management	14	18	
Stenography IV	19			Business English	30	6	
Office Practice I	69			Sales	10	20	
Office Practice II	35			Vocations	22	22	

The total enrollment for Lincoln High School was 1171. The Ethnic enrollment consisted of: Negro 4, Spanish 161, white 1005, and other 1.

Potential Occupational Value: Total numbers of students were not given, numbers indicate areas checked by the instructors.

Exploratory - 4	Beginning Occup. Skill - 18
Personal Skill - 7	Advanced or Job Level Occup. Skill - 14
Occupational Related - 0	

According to the instructors, for persons seeking employment in the future, the present classes provide potential value for the following occupations: stenography, clerical, typists, bookkeepers, clerks, and general office.

Student Potential: Numbers of students were not given, numbers indicate the areas which were checked by the instructors.

College - 1    Post High School - 6    Advanced High School - 7    Low High School - 4  
There were 8 mixed classes.

## MANUAL HIGH SCHOOL - Business Education

### Facilities and Equipment:

<u>No. of Classes</u>	<u>No. of Classrooms</u>	<u>Vacant Periods</u>	<u>Type of Classrooms</u>
7	-	-	General Classrooms
8	2	5	Typing Room
4	1	4	Office Machine Rooms

One of the general classrooms is shared with another teaching area for two periods

Equipment in the office machine classroom is in fair condition and limited in extent while equipment in the typing rooms is generally good but limited in extent. No office practice laboratory is available.

<u>ENROLLMENT:</u>	<u>Females</u>	<u>Males</u>		<u>Females</u>	<u>Males</u>
<u>Courses</u>			<u>Courses</u>		
Bookkeeping	7	1	Typing IV	21	9
D. E.	7	5	Career Clerical	24	10
Business Math	10	12	Office Practice I	12	
General Business II	15	12	Office Practice II	23	4
Typing I	46	38	Stenography II	11	
Typing II	62	23	Stenography IV	6	
Typing III	30	3	Transcribing II	5	

There were 394 students enrolled at the Manual High School. The Ethnic enrollment consisted of 239 Negro, 111 Spanish, 39 white and 5 other.

### Potential occupational value:

Exploratory - 32

Beginning Occupational Skill - 18

Personal Skill - 27

Advanced or Job Entry Level Occup Skill - 14

Occupational Related - 0

According to the instructors, for persons seeking employment in the future, the present classes provide potential value for the following occupations: general office, secretarial, bookkeeping, sales, advertising, merchandise handling, typists, clerks, machine transcription, and stenographers.

### Student potential:

College - 0    Post High School - 0    Average High School - 262    Low High School - 11

## WEST HIGH SCHOOL - Business Education

### Facilities and Equipment:

<u>No. of Classes</u>	<u>No. of Classrooms</u>	<u>Vacant Periods</u>	<u>Type of Classrooms</u>
7	-	-	General Classrooms
3	1	5	General Purpose & Business Machine
21	3	5	Typing Rooms and Office Practice

Two typing rooms have generally poor equipment with one being adequate and the other limited in extent. The third is in good condition but limited. General purpose and business machine room equipment was rated as in fair condition and adequate in extent.

Instructors expressed the need for the following additional space and equipment: lack of electric outlets, overhead screens, storage facilities, machine space inadequate, too many typewriters for office practice, desks are too small, and no aisles for walking.

One instructor made the suggestion that the general machine room be revamped into an office style room so that it could be used more effectively.

Types of occupational courses which could be offered: typing, office work, stenography, and office occupations.

<u>ENROLLMENT:</u>	Females	Males		Females	Males
<u>Courses</u>			<u>Courses</u>		
Bookkeeping I	23	18	Transcription II	12	
Economics	4	4	Career Clerical	12	
Business Law	10	10	Typing I	69	31
Business Math II	42		Typing II	119	32
Office Practice I	10		Typing III	60	4
Office Practice II	14		Typing IV	60	10
Office Occupation	17		Career Typing	35	
Stenography	12				

The total enrollment for West High School was 648. The Ethnic enrollment consisted of: 9 Negro, 280 Spanish, 351 white, 3 other, and 5 unknown.

Potential occupational value: Numbers of students were not given, numbers indicate areas which instructors checked.

Exploratory - 19	Beginning Occupational Skill - 18
Personal Skill - 16	Advanced or Job Entry Level Occupational Skill - 14
Occupational Related - 18	

According to instructors, for persons seeking employment in the future, the present classes provide potential value for the following occupations: typists, clerks, secretaries, bookkeepers, office workers.

### Student Potential:

College - 3    Post High School - 5    Average High School - 4    Low High School - 2

Sixteen (16) classes were composed of students with mixed potentials. The numbers of students were not given, the numbers indicate the areas checked by the instructors.



## JEFFERSON HIGH SCHOOL - Business Education

### Facilities and Equipment:

<u>No. of Classes</u>	<u>No. of Classrooms</u>	<u>Vacant Period</u>	<u>Type of Classrooms</u>
5	1	-	General classrooms
11	1	2	Typing & Office Practice Rooms
9	1	4	Typing & Stenography Rooms

Instructors indicated that more classroom equipment is needed: more calculators, adding machines, overhead projectors, recording and transcribing devices, electrical outlets, and electric typewriters.

Equipment in typing and typing combination rooms is rated in fair condition but quite limited

### ENROLLMENT:

	Female	Male		Female	Male
<u>Courses:</u>			<u>Courses:</u>		
Typing II	38	35	Personal Short Hand	6	
Typing III	41	4	Office Practice	12	
Typing IV	23		Bookkeeping	16	10
Personal Typing	169	115	Business Math	17	27
Stenography II	23		Business Law	17	12
Stenography IV	10	1	Transcription II	10	1

The total enrollment in Business Education at Jefferson High School was 599, with the ethnic enrollment consisting of: Negro 1, Spanish 2, white 563, and other 1. Thirty-two students were unaccounted for.

### Potential Occupational Value:

Numbers of students were not given; the numbers given are only the areas checked by the instructors.

Exploratory - 3   Personal Skill - 10   Occup. Related - 0   Beg. Occup. Skill - 9  
Adv. Occup. Skill - 3

According to the instructors, for persons seeking employment in the future, the present classes provide potential value for the following occupations: bookkeepers, clerks, typists, secretaries, and stenographers.

### Student Potential:

The number of students was not given; the numbers indicated are only the areas checked by the instructors

College - 6   Post High School - 19   Advanced High School - 0   Low High School - 0

## WASHINGTON High School - Business Education

### Facilities and Equipment:

<u>No. of Classes</u>	<u>No. of Classrooms</u>	<u>Vacant Periods</u>	<u>Type of Classrooms</u>
20	3	-	General Classrooms
11	2	5	Typing Rooms
6	1	3	Typing & Office Practice Rooms

The instructors felt that there was a need for more up-to-date equipment in the classrooms. Recommendations such as electric typewriters, electric office machines, larger desks, sinks, and record players were made. No comments were made pertaining to the size of rooms or crowded classes.

Equipment was in generally good condition but limited in extent, both in more modern type and kinds. It is adequate for some of the beginning classes.

ENROLLMENT:	Female	Male	Female	Male
-------------	--------	------	--------	------

#### Courses:

Typing I	26	30
Typing II	106	27
Typing III	61	9
Typing IV	34	
Personal Typing I	0	0
Personal Typing II	0	0
Transcribing II	18	
Stenography II	100	2
Stenography IV	18	
Personal Short Hand	7	1
Office Practice I	13	

#### Courses:

Business Math II	39	23
Business Law	30	43
Bookkeeping I	24	8
Bookkeeping II	43	13
Business English	22	1
Economics	15	26
Business Organ. and Management	4	17
Business Math I	16	11
Bookkeeping IV	8	8

The total enrollment in Business Education at Washington High School was 803, with the Ethnic enrollment consisting of: Negro 41, Spanish 11, White 747, and other 1. Three were unaccounted for.

### Potential Occupational Value:

The numbers were not given, numbers indicate only areas which the instructors checked.

Exploratory - 4 Per. Skill - 8 Occup. Related - 5 Beg. Occup Skill - 4  
Adv. Occup. Skill - 8

According to the instructors, for persons seeking employment in the future, the present classes provide potential value for the following occupations: clerks, typists, stenographers, bookkeepers.

### Student Potential:

The number of students were not given, numbers indicate only the areas which were checked by the instructors.

College -14 Post High School -13 Advanced High School -17 Low High School -1

## JOHN F. KENNEDY HIGH SCHOOL - Business Education

### Facilities and Equipment:

<u>No. of Classes</u>	<u>No. of Classrooms</u>	<u>Vacant Periods</u>	<u>Type of Classrooms</u>
6	1	4	General Classroom & Steno.
15	3	15	Typing Rooms
4	1	5	Bookkeeping Room

The instructors felt that the equipment in the rooms needs to be more up-to-date. There is a need for more supplementary materials, electric typewriters, demonstration stands, wash basins, etc. One classroom was in need of more adequate electrical wiring.

The bookkeeping, two typing and the sten-general clerical room equipment was rated as in generally good condition and adequate. One typing room was rated poor and limited.

ENROLLMENT:		Female	Male			Female	Male
<u>Courses:</u>				<u>Courses:</u>			
Typing I	13	12		Stenography IV	8		
Typing II	39	24		Personal Short Hand	20	2	
Typing III	21	2		Office Practice I & II	19		
Typing IV	12			Business Math	6	6	
Personal Typing I	54	45		Business Law	9	21	
Personal Typing II	57	32		General Business II	20	28	
Transcribing II	8			Bookkeeping II	15		
Stenography II	32	32					

The total enrollment in Business Education at John F. Kennedy High School was 538, with the Ethnic enrollment consisting of: Negro 0, Spanish 15, white 521, and other 2.

### Potential Occupational Value:

The number of students was not given; numbers indicate only areas checked by the instructors.

Exploratory - 4    Personal Skill - 7    Occup. Related - 1    Beg. Occup. Skill - 6  
Adv. Occup. Skill - 4

According to the instructors, for persons seeking employment in the future, the present classes provide potential value for the following occupations: stenography, clerical, typist, bookkeeping, clerk, and general office.

### Student Potential:

The number of students was not given; numbers indicate only the areas which were checked by the instructors.

College -1    Post High School -6    Advanced High School -7    Low High School -0  
There were eight mixed classes.

## **NORTH HIGH SCHOOL - Business Education**

### **Facilities and Equipment:**

<u>No. of Classes</u>	<u>No. of Classrooms</u>	<u>Vacant Periods</u>	<u>Type of Classrooms</u>
22	3	-	General lassrooms
5	1	3	Office Practice
21	2	3	Typing Rooms

The three typing rooms were indicated as having limited equipment and that was in fair condition.

Most instructors felt that the classrooms were too small and should be equipped with adding machines and larger desks. Several complained about the noise and distrubances from adjoining rooms. The noise seemed to hamper the efforts of classes such as stenographic where a large amount of oral work in class is done. The office practice room seems to be made over from a cloak room. The instructor felt that the room is very poorly equipped and too small. The typing rooms are poorly ventilated and lacked the proper equipment to offer more occupational courses.

### **ENROLLMENT:**

**Female Male**

**Female Male**

#### **Courses:**

Bookkeeping I	46	6
Bookkeeping II	44	11
Business Math I	56	37
Business Law	30	15
Business Arith. II	35	20
General Business	16	6
Business English	19	1

#### **Courses:**

Typing I	66	51
Typing II	115	44
Typing III	80	8
Typing IV	51	1
Transcribing II	10	
Stenography IV	19	
Personal Short Hand	13	1

The total enrollment in the Business Education classes at North High School was 1016, with the Ethnic enrollment consisting of: Negro 1, Spanish 301, white 701, and other 12.

### **Potential Occupational Value:**

The number of students was not given; numbers indicate oniy the areas that the instructors checked.

Exploratory - 7   Personal Skill - 21   Occup. Related - 2   Beg. Occup. Skill - 12  
Adv. Occup. Skill - 9

According to the instructors, for persons seeking employment in the future, the present classes provide potential value for the following occupations: typists, clerks, receptionists, secretaries, bookkeepers, and stenographers.

### **Student Potential:**

NOTE: The number of students listed were not given by the instructors; figures given indicate only areas checked by the instructors.

College - 12   Post High School - 8   Advanced High School - 39   Low High School - 0

TABLE A-2  
HOME ECONOMICS

	South	East	Lincoln	Manual	West	Jefferson	Washington	JFK	North
Male	0	1	77	16	53	0	0	0	92
Female	467	541	520	374	386	254	263	642	464
-----									
Negro	0	299	3	330	14	0	6	0	3
Spanish	37	44	95	51	243	2	1	19	234
White	429	188	482	6	176	256	233	621	304
Other	1	8	0	3	3	0	0	2	1
-----									
College	5*	11,0*	160	2*	22	108	3*	22*	46,0*
Post H.S.	5*	64,2*	71	1*	64	89	2*	1*	21,1*
Adv. H.S.	13*	64,6*	153	9*	101	64	8*	2*	20,14*
Low H.S.	1*	21,7*	58	13*	63	5	0*	0*	16,8*
Mixed									
TOTAL	467	542	597	390	439	254	263	642	556
CLASSES	25	26	28	22	27	11	13	27	29

Total Home Economics:  
Enrollment 4628  
Classes 208

NOTE: See notes on page A-1

## **SOUTH HIGH SCHOOL - Home Economics**

### **Facilities and Equipment:**

<u>No. of Classes</u>	<u>No. of Classrooms</u>	<u>Vacant Periods</u>	<u>Type of Classrooms</u>
9	1	0	Foods Laboratory
9	1	0	Clothing Laboratory
7	1	2	Clothing & Creative Homemaking Laboratory

One instructor felt that there is limited space and equipment in order to give each student individual help. Also, the class size has made the optimum use of the facility difficult.

Equipment in each of the three laboratories is in generally good condition but limited in extent.

ENROLLMENT:		Female			Female
<u>Courses:</u>			<u>Courses:</u>		
Foods I	44		Clothing II		56
Foods II	51		Senior Clothing		41
Senior Foods	36		Creative Clothing		14
Hostess Cooking	12		Decorative Clothing		8
Advanced Foods	15		Advanced Clothing		77
Clothing I	65		Creative Homemaking		48

There were no male students enrolled in the Home Economics classes at South High School.

The total enrollment was 467 with the Ethnic enrollment consisting of: Negro 0, Spanish 37, white 429 and other 1.

### **Potential Occupational Value:**

The number of students was not given; the numbers indicate areas checked by the instructors.

Exploratory - 9   Personal Skill - 8   Occup. Related - 1   Beg. Occup. 6  
Adv. Occup. Skill - 1

According to the instructors, for persons seeking employment in the future, the present classes provide potential value for the following occupations: dressmaking, dress design, sewing, and homemaking.

### **Student Potential:**

The number of students was not given. The numbers indicate the areas checked by the instructors.

College - 5   Post High School - 5   Advanced High School - 13   Low High School - 1



## EAST HIGH SCHOOL - Home Economics

### Facilities and Equipment:

<u>No. of Classes</u>	<u>No. of Classrooms</u>	<u>Vacant Periods</u>	<u>Type of Classrooms</u>
9	1	0	Foods Laboratory
12	2	4	Clothing Laboratory
5	1	1	All purpose Home Ec. Lab.

One instructor felt that the facilities for food service are limited. She also felt that the class which meets at 7:55a.m., is too early. The 43 minute classes are too short. Another instructor felt that the room is large enough but should be divided. In general however, the clothing and foods laboratories are adequate in extent of equipment and it is in excellent condition while the all purpose laboratory is comprehensively equipped and the equipment in excellent condition.

ENROLLMENT:                      Female                      Female

#### Courses:

Foods I	42
Foods II	57
Advanced Foods	46
Senior Foods	19
Homemaking	14
Home Decorating	25
Homemaking Skills	50

#### Courses:

Creative Homemaking	20
Clothing I	54
Clothing II	88
Senior Clothing II	16
Advanced Clothing	91
Creative Clothing	19

There was one male enrolled in the Home Decorating class.

The total enrollment was 542, with the Ethnic enrollment consisting of: Negro 299, Spanish 44, white 188, other 8, and 3 unaccounted for.

### Potential Occupational Value:

Exploratory 34    Personal Skill 152    Occup. Related 105    Beg. Occup. 86  
Adv. Occup. Skill 19.    Other instructors only indicated the areas:  
Exploratory 2    Personal Skill 1    Occup. Related 1    Beg. Occup. 2  
Adv. Occup. Skill 6

According to the instructors, for persons seeking employment in the future, the present classes provide potential value for the following occupations: dressmaking, alterations, interior decoration, and food service.

### Student Potential:

College - 111    Post High School - 64    Adv. High School - 64    Low High School - 21  
Other instructors checked the areas only:  
College - 0    Post High School - 2    Adv. High School - 6    Low High School - 7

## LINCOLN HIGH SCHOOL - Home Economics

### Facilities and Equipment:

<u>No. of Classes</u>	<u>No. of Classrooms</u>	<u>Vacant Periods</u>	<u>Type of Classrooms</u>
16	2	0	Foods Laboratory
5	1	3	Clothing & Foods Laboratory
7	1	1	Clothing Laboratory

Equipment in the two foods laboratories is in good condition and of adequate extent for present program. The combined foods and clothing laboratory is thought to be in good condition and fairly comprehensively equipped although small for planned programs. An additional clothing laboratory is in excellent condition and comprehensively equipped.

ENROLLMENT:		Female	Male			Female	Male
<u>Courses:</u>				<u>Courses</u>			
Service Foods	23			Clothing I	48		
Host and Hostess	28			Clothing II	53		
Senior Foods	33			Advanced Clothing	39		
Foods I	83			Senior Clothing I	23		
Foods II	47			Home Decorating	27		
Advanced Foods	33			Creative Homemaking	47		
Senior Clothing II	21			Boys foods		49	
				Boys Services		28	

The total enrollment in Home Economics at Lincoln High School was 597, with the Ethnic enrollment of Negro 3, Spanish 95, hite 482, and other 0, 17 were unaccounted for.

### Potential occupational value:

The number of students were not given, numbers indicate the areas which were checked by the instructors.

Exploratory - 0    Personal Skill - 24    Occup. Related - 3    Beg. Occup. Skill - 4  
Adv. Occup. Skill - 1

Instructors did not indicate any potential occupational value the present classes provide.

### Student potential:

College - 160    Post High School - 71    Advanced High School - 153    Low High School - 58

## MANUAL HIGH SCHOOL - Home Economics

### Facilities and Equipment:

<u>No. of Classes</u>	<u>No. of Classrooms</u>	<u>Vacant Periods</u>	<u>Type of Classrooms</u>
14	2	2	Foods Laboratory
8	1	0	Clothing Laboratory

One instructor points out that a clothing-textiles course will be offered in the fall of 1968 which will probably require more equipment and time. Other comments were not made.

Equipment in the two foods laboratories is in good condition; one is adequate in extent and the other limited. The clothing laboratory equipment is in fair condition and limited.

ENROLLMENT:	Female	Male	Female	Male
<u>Courses</u>			<u>Courses</u>	
Creative Clothing	14		Advanced Foods	42
Clothing I	45		Host & Hostess	18 3
Clothing II	63		Boys Foods	13
Advanced Clothing	41		Vocational courses	
Foods I	51		Lab Center	42
Foods II	54			

The total enrollment in Home Economics at Manual High School was 390 with an Ethnic enrollment of: Negro 330, Spanish 51, white 6, and other 3.

### Potential occupational value:

The numbers of students were not given, the numbers indicate the areas checked by the instructors.

Exploratory - 0 Personal Skill - 2 Occup. Related - 0 Beg. Occup Skill - 16  
Adv. Occup. Skill - 0.

According to the instructors, for persons seeking employment in the future, the present classes offer occupational value for the following occupations: dress maker and designer, alterations, sales clerk, seamstress, food service, child care, floral industry, cook, waitress, and kitchen help.

### Student Potential:

The numbers of students were not given, the numbers indicate the areas checked by the instructors:

College - 2 Post High School - 1 Advanced High School - 9 Low High School - 13

## WEST HIGH SCHOOL - Home Economics

### Facilities and Equipment:

<u>No. of Classes</u>	<u>No. of Classrooms</u>	<u>Vacant Periods</u>	<u>Type of Classrooms</u>
6	1	3	Foods Laboratory
14	3	12	Clothing Laboratory
7	1	2	Butler Building

One instructor indicated that power sewing machines and pressing equipment are needed. Another indicated that the areas are too small for individual work, but they are very inadequate for work with an entire group.

Equipment in the foods and clothing laboratories is rated as in good condition and adequate in extent. The Butler Building is rated as in excellent condition and adequate for wage earning programs.

The type of occupational courses which could be offered were: food service, laundry, sewing, and home nursing.

<u>ENROLLMENT:</u>		<u>Female</u>	<u>Male</u>			<u>Female</u>	<u>Male</u>
<u>Courses</u>				<u>Courses</u>			
Advanced Foods		30		Creative Home.		17	
Host & Hostess		26	6	Senior Clothing I & II		20	
Senior Foods I & II		24		Clothing I		21	
Foods I		42		Clothing II		21	
Foods II				Bus. & Ind. Home Skills		30	12
and Advanced Foods		16		Career Home Ec. Soph		32	
Home Decorating		42		Career Home Ec.		16	
Creative Clothing		12					
Advanced Clothing		37					
Boys Foods			35				

The total enrollment in Home Economics at West High School was 439. The Ethnic enrollment consisted of: Negro 14, Spanish 243, White 176, and Other 3, with 3 unaccounted for.

### Potential occupational value:

Exploratory - 51 Personal Skill - 56 Occup. Related - 21 Beg. Occup. Skill - 14  
Adv. Occup. Skill - 2

Other instructors only checked the areas as follows:

Exploratory - 0 Personal Skill - 11 Occup. Related - 0 Beg. Occup. Skill - 3  
Adv. Occup. Skill - 4

According to the instructors, for persons seeking employment in the future, the present classes provide potential value for the following occupations: dressmaking, alterations, waitresses, laundry, food service, child care, and home furnishing.

### Student Potential:

College - 22 Post High School - 64 Advanced High School - 101 Low High School - 63

## JEFFERSON HIGH SCHOOL - Home Economics

### Facilities and Equipment:

<u>No. of Classes</u>	<u>No. of Classrooms</u>	<u>Vacant Periods</u>	<u>Type of Classrooms</u>
5	1	1	Foods Laboratory
5	1	1	Clothing Laboratory
1	1	7	Homemaking Laboratory

Facilities and staff are utilized for both junior and high school classes. Some upgrading of the rooms themselves should be accomplished, including wall covering in the kitchen area and storage space.

The foods and homemaking laboratories are comprehensively equipped while the equipment is in fair and good condition respectively. In the clothing lab., the equipment is limited, lack of power equipment, but in good condition.

### ENROLLMENT:

Female

Female

#### Courses:

Foods I	27
Foods II	29
Advanced Foods	18
Hostess Cooking	15
Clothing II	45

#### Courses:

Senior Clothing	34
Advanced Clothing	34
Creative Clothing	31
Home Decorating	21

There were no male students attending the Home Economics classes at Jefferson High School.

The total enrollment was 732 with the Ethnic enrollment consisting of: Negro 2, Spanish 4, white 724 and other 2.

### Potential Occupational Value:

Exploratory 490    Personal Skill 282    Occup. Related 27    Beg. Occup. 67  
Adv. Occup. Skill 2

According to the instructors, for persons seeking employment in the future, the present classes provide potential value for the following occupations: waitress, hostess, and sales personnel.

### Student potential:

College - 306    Post High School - 175    Advanced High School - 89    Low High School - 4

## **WASHINGTON HIGH SCHOOL - Home Economics**

### **Facilities and Equipment:**

<b><u>No. of Classes</u></b>	<b><u>No. of Classrooms</u></b>	<b><u>Vacant Periods</u></b>	<b><u>Type of Classrooms</u></b>
6	1	2	Foods Laboratory
7	1	1	Clothing Laboratory

Overall, enrollment in home economics is small. One home economics laboratory has been converted for use as a science laboratory. The two laboratories are comprehensively equipped for present programs and the equipment is in excellent condition.

### **ENROLLMENT:**

**Females**

**Females**

#### **Courses:**

#### **Courses:**

Foods I	13
Foods II	34
Senior Foods II	17
Clothing I	36

Clothing II	75
Senior Clothing II	15
Advanced Clothing	30
Home Decorating	53

There were no male students attending the Home Economics classes at Washington High School.

The total enrollment was 263 with the Ethnic enrollment consisting of: Negro 6, Spanish 1, white 233, other 0, and 23 unaccounted for.

### **Potential Occupational Value:**

Exploratory - 0 Personal Skill - 8 Occup. Related - 4 Beg. Occup. - 0  
Adv. Occup. Skill - 0. The number of students was not given; the numbers indicate the areas checked by the instructors.

According to the instructors, for persons seeking employment in the future, the present classes provide potential value for the following occupations: saleslady, dressmaker, and designer.

### **Student potential:**

Numbers of students were not given, numbers indicate the areas checked by the instructors.

College - 3 Post High School - 2 Advanced High School - 8 Low High School - 0



JOHN F. KENNEDY - Home Economics

Facilities and Equipment:

<u>No. of Classes</u>	<u>No. of Classrooms</u>	<u>Vacant Periods</u>	<u>Type of Classrooms</u>
12	2	8	Food Laboratory
15	2	5	Clothing Laboratory

Equipment in the two foods and one clothing laboratory is in excellent condition and adequate in extent; the other clothing laboratory is in good condition and adequate. Most laboratories are being used as general classrooms by other subject area for a part of each day.

ENROLLMENT:

Female

Female

Courses:

Foods I	20
Foods II	26
Advanced Food Hostess	13
Clothing II	14
Senior Clothing and Creative Clothing	14

Courses:

Advanced Clothing	26
Creative Homemaking	14

There were no males attending the Home Economics classes at John F. Kennedy High School.

The total enrollment was 642 with the Ethnic enrollment consisting of: Negro 0, Spanish 19, white 621, and other 2.

Potential Occupational Value:

Numbers of students were not given, the numbers indicate the areas checked by the instructors.

Exploratory - 27 (All other areas were not checked).

No instructor indicated any potential occupational value which the present classes provide.

Student Potential:

The number of students were not given, the numbers listed indicate the areas checked by the instructors.

College - 22    Post High School - 1    Advanced High School - 2    Low High School - 0

**NORTH HIGH SCHOOL - Home Economics**

**Facilities and Equipment:**

<u>No. of Classes</u>	<u>No. of Classrooms</u>	<u>Vacant Periods</u>	<u>Type of Classrooms</u>
16	2	0	Foods Laboratory
7	1	1	Clothing Laboratory
6	1	2	Home Economic & Occupational Education

The feeling of one instructor was that the Home Economics room could be used more effectively if the room had been furnished with dividers and with the kitchen area at one end rather than in the center. The clothing lab seems to be too crowded, but can be used. Power machines and larger tables could also be used in the clothing lab. One foods laboratory has equipment in good condition and adequate in extent while in the other it is in poor condition and limited. The clothing laboratory is in generally good condition. New facilities for the general purpose and occupational education are in excellent condition and comprehensive.

The type of occupational courses which could be taught were: commercial dressmaking, food preparation and service, clothing construction and care, and laundry work. Some restaurant work was also mentioned.

<u>ENROLLMENT</u>		<u>Female Male</u>	
<u>Courses</u>			
Foods I	73		
Foods II	45		
Senior Foods I	18		
Senior Foods II	8		
Advanced Foods	43		
Host and Hostess	9	37	
Senior Boys Foods		55	
<u>Courses</u>			
Home Skills for Bus. and Indus.			56
Creative Homemaking			16
Clothing I			39
Clothing II			70
Senior Clothing			23
Advanced Clothing			43

The total enrollment in Home Economics at the North High School was 556 with the Ethnic enrollment consisting of: Negro 3, Spanish 234, white 304, other 14, and 1 unaccounted for.

**Potential occupational value:**

Exploratory - 34    Personal Skill - 48    Occupational Related - 0    Beg. Occup. - 23  
Adv. Occup. Skill - 0. These numbers were given by one instructor only; the other instructors checked the areas only as:  
Exploratory - 2    Personal Skill - 14    Occupational Related - 0    Beg. Occup - 0  
Adv. Occup. Skill - 4

According to the instructors, for persons seeking employment in the future, the present classes provide potential value for the following occupations: basic kitchen skills, restaurant work, food service, clothing manufacturing, and child care.

**Student potential:**

College - 46    Post High School - 21    Advanced High School - 20    Low High School - 16  
These numbers were listed by one instructor only; other areas which were checked by instructors were:  
College - 0    Post High School - 1    Advanced High School - 14    Low High School - 8

TABLE A-3  
INDUSTRIAL ARTS

	South	East	Lincoln	Manual	West	Jefferson	Washington	JFK	North
Male	417	613	665	300	580	208	443	225	680
Female	5	20	5	7	3	1	91	1	72
-----									
Negro	1	212	0	200	9	0	20	0	3
Spanish	25	57	85	74	298	0	5	3	186
White	396	357	555	19	3	208	504	223	537
Other	0	24	25	13	1	1	4	0	5
-----									
College	150	97	1*	48	19,3*	4*	182	5*	45
Post H. S.	44	79	8*	15	13,4*	3*	78	5*	83
Adv. H. S.	96	367	20*	66	90,11*	0*	209	8*	456
Low H. S.	75	51	7*	77	8,3*	0*	46	0*	131
Mixed									
-----									
TOTAL	422	638	665	307	584	209	534	241	731
CLASSES	29	33	29	17	33	11	26	12	34
Total Industrial Arts Enrollment:									
Enrollment									4321
Classes									224

NOTE: See notes at bottom of Table A-1

## **SOUTH HIGH SCHOOL - Industrial Arts**

### **Facilities and Equipment:**

<u>No. of Classes</u>	<u>No. of Classrooms</u>	<u>Vacant Periods</u>	<u>Type of Classrooms</u>
9	1	0	Woodshop
7	1	2	General Shop
11	2	7	Mechanical Drawing

The feeling was expressed that there was not enough space, especially storage space; three out of four labs apparently have a storage problem. Two instructors in woods and mechanical drawing indicated a shortage of materials due to the purchasing procedures. Generally, it was felt that more space is needed if any type of occupational programs are to be offered in the future. Equipment in the woodshop and general shop is in good condition but limited in extent. The equipment in one of the mechanical drawing rooms is poor, however, and also limited. The other mechanical drawing room has adequate equipment which is in good condition.

It should be noted that both mechanical drawing sections have a large number of potential college students, as indicated by the instructors. This may indicate that the opportunity exists for developing some type of "pre-engineering" programs.

Types of occupational programs indicated that could be offered were:  
Only one drafting instructor felt that any type of occupational programs could be offered.

### **ENROLLMENT:          Female      Male**

#### **Courses:**

Drafting	3	246
Woodworking		89
Metals		61
Crafts	2	21

The total enrollment in Industrial Arts at South High School was 422, with the Ethnic enrollment consisting of: Negro 1, Spanish 25, white 396, and other 0.

#### **Potential Occupational Value:**

The number of students was not given; figures indicate only the areas checked by the instructors. In most cases, the instructors checked more than one area, however, it is not possible to estimate the value, in terms of numbers of students, each checked.

Exploratory - 8    Personal Skill - 11    Occup Related - 13    Beg. Occup. Skill - 8  
Adv. Occup. Skill - 1

According to the instructors, for persons seeking employment in the future, the present classes provided potential value for the following occupations: welding, auto-body mechanics, maintenance crews, and draftsmen.

#### **Student Potential:**

College - 150    Post High School - 44    Advanced High School - 96    Low High School 75  
57 students were unaccounted for.

NOTE: Additional data, such as total enrollment, ethnic enrollment, etc., not given for three woodworking classes. Also, student potential figures had to be estimated from per cents not in agreement.

## **EAST HIGH SCHOOL - Industrial Arts**

### **Facilities and Equipment:**

<u>No. of Classes</u>	<u>No. of Classrooms</u>	<u>Vacant Periods</u>	<u>Type of Classrooms</u>
5	1	3	Woodshop
8	1	0	Mechanical Drawing
6	1	2	Electronics Lab
4	1	4	Metal Shop
4	1	4	Voc. Basic Metals
6	1	2	Crafts Lab.

The general feeling was that existing equipment and limited space would have to be improved before occupational programs could be offered in the future. One mechanical drawing instructor felt that longer periods were necessary for offering occupational programs.

The equipment in the mechanical drawing room, the metal shop, and the crafts lab. is in poor condition while in the woodshop the equipment is in fair condition. The electronics lab. has equipment which is in good condition while the voc. basic metals shop has equipment which is in excellent condition. The woodshop, electronics lab, metal shops, and the crafts lab has limited equipment while the mechanical drawing room has adequate equipment. The equipment in the voc. basic metals shop is comprehensive.

The types of occupational programs listed that could be offered were: basic metals (welding; arc-acetylene, sheet metal) electronics and drafting.

**ENROLLMENT:**                      Female      Male

### **Courses:**

Mechanical drawing	9	167
Crafts	11	122
Woodworking		110
Electronics		106
Metals		113

The total enrollment at East High School in Industrial Arts was 638, with the Ethnic enrollment consisting of: Negro 212, Spanish 57, white 357 and other 24.

### **Potential Occupational Value:**

Exploratory - 205    Personal Skill - 185    Occup. Related - 79    Beg. Occup. Skill - 89  
Adv.Occup. Skill - 65

According to the instructors, for persons seeking employment in the future, the present classes provide potential value for the following occupations: crafts, metalworking trades, welding, electronics tech., drafting, cabinetmaking, and home repairs.

**NOTE:** All crafts were listed as (2), personal use or skill development.

### **Student Potential:**

College - 97    Post High School - 79    Advanced High School - 367    Low High School - 51  
44 students were unaccounted for.

## LINCOLN HIGH SCHOOL - Industrial Arts

### Facilities and Equipment:

<u>No. of Classes</u>	<u>No. of Classrooms</u>	<u>Vacant Periods</u>	<u>Type of Classrooms</u>
5	1	2	General Metals
6	1	2	Woodshop
9	1	0	Crafts and Leathercraft
3	1	5	Basic Electronics Lab.
6	1	2	Mechanical Drawing

Two instructors indicated that there would be adequate space available for expansion in drafting and electronics; others indicated that space is limited such as in welding and for project storage in woods. All Industrial Arts and classroom have equipment which is in good to excellent condition. The crafts and leathercraft shop has adequate equipment while the equipment in the metals shop, woodshop, and the electronics lab is limited in extent.

The types of occupational courses that could be offered were: computer or industrial electronics, industrial plastics, building trades, welding and sheet metal, and drafting

### ENROLLMENT:

	<u>Females</u>	<u>Males</u>
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#### Courses

Leather	3	104
Mechanical Drawing	3	154
Metals		87
Crafts		132
Electronics		71
Woodworking		117

The total enrollment in Industrial Arts at Lincoln High School was 665, while the Ethnic enrollment was Negro 0, Spanish 85, white 555 and other 25.

### Potential occupational value:

The number of students were not given; figures indicate only the areas checked by the instructors.

Exploratory - 15    Personal Skill - 15    Occup. Related - 6    Beg. Occup. Skill - 4  
Adv. Occup. Skill - 2.

According to instructors, for persons seeking employment in the future, the present classes provide potential value for the following occupations: heating and air-conditioning, sheet metal, and production welding.

### Student potential:

The numbers of students were not given, figures indicate areas checked by the instructors:

College-1    Post High School - 8    Advanced High School - 20    Low High School - 7



## MANUAL HIGH SCHOOL - Industrial Arts

### Facilities and Equipment:

<u>No. of Classes</u>	<u>No. of Classrooms</u>	<u>Vacant Periods</u>	<u>Type of Classrooms</u>
4	1	4	Mechanical Drafting
5	1	3	Woodshop
2	1	2	Building Trades
2	1	2	Metal Shop
4	1	2	General Metals

The building trades instructor indicated that an outside door and a concrete floor section would be desirable in his area. The equipment located in the mechanical drawing room, the woodshop, the metal shop and the general metals shop is in good condition and is adequate in extent. The building trades room has equipment which is in poor condition and limited in extent.

The types of occupational courses that could be offered as indicated by the instructors were: building trades, welding and sheet metals, machine shop, cabinet making, carpentry, and drafting.

### ENROLLMENT:

Female      Male

#### Courses

Drafting	7	101
Woods		59
Building trades		31
Voc. Metals		35
General Metals		54

The total enrollment in Industrial Arts at Manual High School was 307.

The Ethnic enrollment consisted of: Negro 200, Spanish 74, white 19, and other 13.

### Potential occupational value:

Exploratory - 62    Personal Skill - 12    Occup. Related - 19    Beg. Occup Skill - 83  
Adv. Occup. Skill - 45

According to the instructors, for persons seeking employment in the future, the present classes provide potential value for the following occupations: building trades, welding and sheet metal, machine shop, cabinet making and carpentry, and drafting.

### Student Potential:

College - 48    Post High School - 15    Advanced High School - 66    Low High School - 77

**WEST HIGH SCHOOL - Industrial Arts****Facilities and Equipment:**

<u>No. of Classes</u>	<u>No. of Classrooms</u>	<u>Vacant Periods</u>	<u>Type of Classrooms</u>
6	1	3	Crafts
8	1	1	Woodworking
3	1	6	Print Shop
5	1	4	General Metals
8	1	1	Mechanical Drawing
3	3	0	Basic Metals (Butler Building)

The instructors generally felt that the rooms are not adequate in size and are limited in storage space. One instructor felt that a change in facilities is needed in order to give the class a realistic approach. Rooms 114 and 115 are actually one classroom which has had the wall removed. This room is used for teaching two other areas. Rooms 118 and 119 is also one big room. Room 112 is a machine shop which is being used for only one period a day due to the lack of students. This classroom is a WWT facility which is being remodeled into an auto mechanics shop.

The equipment in the crafts shop and the print shop is in poor condition. The equipment located in the woodshop, the general metals shop, and the drawing room is in good condition. The equipment for the basic metals shop located in the Butler Building is in excellent condition. The type of equipment in the drawing room is adequate. The other shops are limited in extent. The extent to which the equipment in the Butler Building could be used was not indicated.

Types of occupational courses which could be offered: Welding was the only one listed

**ENROLLMENT:**                      Female      Male

**Courses:**

Mech. Drawing I & II	4	68
Mech. Drawing III & IV		20
Pre-Engineering Drawing		7
Electronics I & II		87
Crafts		49
Woodworking I, II, & III		137
Career Woods		12
Printing I, II, & III		36
Printing Service		8
Metals I & II		66
Advanced Metals & Machine Shop		54
Career Metals		20
Pre-Voc. Metals		16

The total enrollment for West High School in Industrial Arts was 584.

The Ethnic enrollment consisted of Negro 9, Spanish 298, white 3 and other 1.

**Potential occupational value:**

These numbers were given by one instructor only.

Exploratory - 0   Personal Skill - 4   Occupational Related-6   Beg. Occup - 16  
Advanced Occup. Skill - 5

The following is the number of areas checked by other instructors:

Exploratory - 5   Personal Skill - 13   Occupational Related - 14   Beg. Occup - 8  
Advanced Occup. Skill 1.

The pre-engineering drawing class is for only students who plan to enter an engineering college.

According to instructors, for persons seeking employment in the future, the present classes provide potential value for the following occupations: machinist, metal trades, drafting.

**Student potential:**

College - 1   Post High School - 13   Advanced High School - 90   Low High School - 8  
These numbers are those which were indicated by one instructor. Other instructors only indicated the areas. These were:

College - 3   Post High School - 4   Advanced High School - 11   Low High School - 3

## JEFFERSON HIGH SCHOOL - Industrial Arts

### Facilities and Equipment:

<u>No. of Classes</u>	<u>No. of Classrooms</u>	<u>Vacant Periods</u>	<u>Type of Classrooms</u>
4	1	4	Drafting
3	1	7	Crafts
2	1	5	Woods
2	1	11	Metals

The general feeling was that if occupational programs were to be offered, more equipment would be needed. One instructor indicated that more storage space is also needed. The condition of all equipment in the Industrial Arts shops and classrooms ranges from good to excellent. The extent to which the equipment may be used ranges from adequate to comprehensive in scope.

The type of occupational programs which could be offered were: drafting, upholstery, house construction, wood finishing, sheet metal, welding, plastics, and leather.

ENROLLMENT:	Female	Male
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### Courses:

Mechanical Drawing	1	78
Crafts		48
Woods		31
Metals		31

The total enrollment in Industrial Arts for Thomas Jefferson High School was 209, with the Ethnic enrollment consisting of: Negro 0, Spanish 0, white 208, and other 1.

### Potential Occupational Value:

The number of students was not given; figures indicate only the areas checked by the instructors

Exploratory - 0   Personal Skill - 3   Occup. Related - 3   Beg. Occup. Skill - 4  
Adv. Occup Skill - 0.

According to the instructors, for persons seeking employment in the future, the present classes provide potential value for the following occupations: draftsman, and engineers.

### Student Potential:

The number of students was not given; figures indicate only the areas checked by the instructors.

College - 4   Post High School - 3   Advanced High School - 0   Low High School - 0

## **WASHINGTON HIGH SCHOOL - Industrial Arts**

### **Facilities and Equipment:**

<b><u>No. of Classes</u></b>	<b><u>No. of Classrooms</u></b>	<b><u>Vacant Periods</u></b>	<b><u>Type of Classrooms</u></b>
6	1	2	Metal Shop
6	1	2	Woodworking Shop
6	1	2	Mechanical Drawing & Drafting
8	1	0	Crafts Lab

Indications were that an exhaust system is needed in the woodshop. Also, the shop appears to be small, preventing any expansion of programs into occupational areas. Most instructors indicated that additional equipment was needed to offer an occupational program. The metal shop and the mech. drawing room have equipment which is in fair condition. The equipment in the wood shop is in good condition while in the crafts lab., the equipment is in good to excellent condition. All shops are limited in extent except the crafts lab. which is comprehensive.

According to the instructors, a large number of students utilize their experience in crafts to seek jobs in jewelry and lapidary. Many of the students hold down part- or full-time jobs while attending classes. It appears that there is a demand for jewelry and lapidary skills due to the heavy resort trade.

<b>ENROLLMENT:</b>	<b>Female</b>	<b>Male</b>
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#### **Courses:**

<b>Crafts</b>	<b>91</b>	<b>107</b>
<b>Metalworking</b>		<b>69</b>
<b>Woods</b>		<b>130</b>
<b>Drafting</b>		<b>127</b>

The total enrollment in the Industrial Arts classes at George Washington High School was 534, with the Ethnic enrollment consisting of: Negro 20, Spanish 6, white 504, and other 4.

### **Potential Occupational Value:**

The number of students were not given; figures indicate only the areas checked by the instructors.

Exploratory - 8   Personal Skill - 14   Occup. Related - 12   Beg. Occup. Skill - 12  
Adv. Occup Skill - 2

According to the instructors, for persons seeking employment in the future, the present classes provide potential value for the following occupations: general metalworking, silversmith, jewelry manufacturing and repair, gem cutters, and cabinetmaking.

### **Student Potential:**

College - 182   Post High School - 78   Advanced High School - 209   Low High School 46  
19 were unaccounted for.

## **JOHN F. KENNEDY HIGH SCHOOL - Industrial Arts**

### **Facilities and Equipment:**

<b><u>No. of Classes</u></b>	<b><u>No. of Classrooms</u></b>	<b><u>Vacant Periods</u></b>	<b><u>Type of Classrooms</u></b>
4	1	6	Drafting
3	1	2	Metals
2	1	2	Woodworking
3	1	1	Crafts - IA

In general, additional space and equipment will be needed if occupational programs are to be offered. All Industrial Arts shops and classrooms have equipment which is good to excellent condition. The extent of the equipment in the woodshop is comprehensive while the equipment in the drafting room and the crafts shop is adequate. There is limited equipment in the metals shop.

**NOTE:** The John F. Kennedy High School is a combined junior and senior high school and data for the 7th, 8th, and 9th grades are not included.

The type of occupational programs indicated that could be offered are: welding, machine shop, electronics, and drafting.

### **ENROLLMENT:**

Female      Male

### **Courses:**

Drafting	1	83
Woods		46
Crafts		25
Leather		12
Electronics		16
Metals		43

The total enrollment in Industrial Arts classes at John F. Kennedy High School was 241; the ethnic enrollment consisted of: Negro 0, Spanish 3, white 223, other 0, and 15 unaccounted for.

### **Potential Occupational Value:**

The number of students were not given; figures indicate only the areas checked by the instructors.

Exploratory 0    Personal Skill 7    Occup. Related 7    Beg. Occup. 10  
Adv. Occup. Skill 5.

According to the instructors, for persons seeking employment in the future, the present classes provide potential value for the following occupations: metal industries, machinest, welders, electronics, plastics, drafting, cabinet making, and woodworking.

### **Student Potential:**

The number of students were not given; figures indicate only the area checked by the instructors.

College - 5    Post High School 5    Advanced High School - 8    Low High School - 0



## **NORTH HIGH SCHOOL - Industrial Arts**

### **Facilities and Equipment:**

<b><u>No. of Classes</u></b>	<b><u>No. of Classrooms</u></b>	<b><u>Vacant Periods</u></b>	<b><u>Type of Classrooms</u></b>
8	1	0	Drafting
7	1	1	Mechanical Drawing Room
6	1	2	General Metals
6	1	2	Leather Craft
7	1	1	Woodshop

The general feeling expresses was that while facilities were adequate for present programs, additional improvement or new equipment was needed if occupational programs were to be offered. One teacher also felt that smaller class loads and longer periods would be necessary in order to offer occupational programs. Two teachers felt that the current industrial arts program offered skills that would lead to employment in the leather and drafting area.

The equipment in the drafting room, the mechanical drawing room, the general metals shops is in fair condition while the equipment in the wood shop is in fair to good condition. The leather craft room has equipment which is in poor condition. The extent to which the drafting room, the general metals shop, and the woodshop may be used is adequate. The mechanical drawing room and the leather craft room are limited in extent.

### **ENROLLMENT:**

Female      Male

#### **Courses**

Drafting	37	281
Woodworking	34	158
Metals		62
Leather Craft		159

The total enrollment at North High School in the Industrial Arts classes was 731, with the Ethnic enrollment consisting of: Negro 3, Spanish 186, white 537, and other 5.

### **Potential Occupational Value:**

Exploratory - 252    Personal Skill - 132    Occup. Related - 94    Beg. Occup. Skill - 184  
Adv. Occup. Skill - 87

According to the instructors, for persons seeking employment in the future, the present classes provided potential value for the following occupations: saddlemaking, welding, metal machine operators, sheet metal, draftsman, building trades, and automotive.

**NOTE:** The leathercraft instructor felt that his classes led mainly to beginning occupational skill developments (3). A total of 84 students were in this category.

### **Student Potential:**

College - 45    Post High School - 83    Advanced High School - 456    Low High School - 131  
16 were unaccounted for.

## **APPENDIX B**

### **Summary of Occupational Training Offered in Selected Industries and Private Training Schools and Colleges**

### Private Business Colleges

Ten Business Colleges were interviewed. Enrollments of these institutions ranged from 900 to 60 students. All institutions required that their students be 18 to 21 years of age to enter. Eight school required high school graduation for enrollment, two had no requirements. No school required experience for entrance.

Seven schools were financed by tuition only, three by tuition and other agencies such as: County welfare, MDTA, State Rehabilitation, and Veterans Administration.

The following table lists the occupations for which the school was preparatory, the length of program, and the number and type of students admitted.

<u>Training Area</u>	<u>Enrollment</u>	<u>Length of Program</u>	<u>Educational Requirements</u>
Bus. Adm.	250	Unknown	H. S. drop-outs and grads.
Secretarial	1005	12,40, and 24 wks.	H. S. grads.
Bus.Programming	888	33,and 24 weeks	H. S. grads.
Keypunch	12	4 to 5 weeks	H. S. grads.
Salesmanship	252	39 weeks	H. S. grads.
Real Estate	75	5,8, and 10 wks.	Unemployed youth & adults
TOTAL	<u>2482</u>		

### Private Technical Schools

There were eleven technical colleges interviewed. Those institutions had enrollments which ranged from eleven to 525 students.

Seven institutions required that the students be at least seventeen years of age. The other four had no age requirements. Four institutions required high school graduation for entrance, three required eighth grade, and four that had no specified educational requirements.

None of the institutions required any experience for entrance

All institutions were financed by student tuitions. All but three were financed by state and federal government through MDTA, State Rehabilitation Veterans Administration, and the G. I. Bill, etc.

All institutions offered programs which were operated continuously.

Length of programs ranged from six weeks to seventy-two weeks.

Groups served by the schools included: disadvantaged youth, unemployed adults, under-employed adults, high school drop-outs, and high school graduates.

Those occupations for which training was offered were: drafting, lithography, automotive technology, electronics technology, radio & TV production, and computer programming, gunsmithing, TV technicians, and welding.

<u>Training Areas</u>	<u>Enrollments</u>	<u>Length of Training</u>	<u>Educational Requirements</u>
Auto. Tech.	745	24 and 52 weeks	H. S. graduates & drop-outs
Electronics Tech.	26	48 and 52 weeks	H. S. graduates
Drafting	218	52,36,72, & 48 weeks	H. S. adults and unemployed youth
Computer Prog.	190	36 and 12 weeks	H. S. graduates
Lithography	16	25 and 36 weeks	Unemployed youth and H. S. graduates
Welding Tech.	30	14 weeks	H. S. drop-outs and graduates
TV Tech.	194	6 34, and 48 weeks	H. S. drop-outs and graduates
Gunsmithing	132	69 weeks	H. S. graduates
TOTAL	1551		

### Miscellaneous Schools - Private

Eighteen schools and institutes are included in this category. Enrollments of these schools ranged from three to 600. All schools required that their students be from 16 to 21 years of age for entrance.

Ten schools required that their students be high school graduates, four required that the student have a grade school education, one required that more than a high school education for entrance, and one had no educational requirements.

None of the schools required experience for entrance.

Five of the schools were financed by tuition only, ten by tuition and such agencies as: State Rehabilitation, MDTA, Veterans Administration, Social Security, and G. I. Bill. One school was sponsored by a private industry.

The following lists the occupations for which the schools were preparatory, the length of the program, and the number and type of students served:

<u>Training Area</u>	<u>Enrollment</u>	<u>Length of Program</u>	<u>Group Served</u>
Fashion Career	75	48 weeks	H. S. grads & college D.O.
Medical Ass't.	98	30 & 48 weeks	Unemployed adults & H.S. grads.
Lab. Tech.	40	48 weeks	Unemployed adults & H.S. grads.
Dental Ass't.	42	17 & 48 weeks	Disadv. youth, H.S. grads
Art Training (skilled)	188	47 & 88 weeks	H. S. grads & D.O
Truck Driving	10	8 weeks	H. S. grads
Grocery Checking	14	4 weeks	H. S. grads
Upholstery	3	48 weeks	H. S. drop-outs
Meatcutting	6	8 weeks	Disadv. youth & H. S. grads
Floral Arr.	45	4 weeks	H. S. grads & drop-outs
Barbering	34	28 weeks	H. S. drop-outs
Gasoline dealer training	6	6 weeks	Company employee
Aviation-flying	434	6,8,16 & 24 wks	H. S. grads
Motel Mgmt.	unavail.	42 weeks	H. S. grads
Commercial Art	90	12 weeks	H. S. grads
Beauty Culture	66	8 & 36 weeks	Anyone over 16
Total	1151		

## Training and Educational Programs Offered by Hospitals

Seven hospitals are included in this category. The number of persons in training ranged from 400 to about 1500.

Minimum age for students ranged from 16 to 21.

Twelve hospital programs required high school graduation, eight had requirements below high school graduation and three required more than a high school graduation.

Two of the twenty-three programs required previous experience.

All of the programs were supported by the hospital itself.

The following is a list of the occupational programs offered by the hospital:

<u>Training Area</u>	<u>Enrollment</u>	<u>Length of Program</u>	<u>Entrance Requirement</u>
Nurses Aide	97	4,6,8, and 12 weeks	H. S. grads. & drop-outs
Ward Secretary	104	4,6,12, and 40 weeks	Employees
Prof. Nurse	95	108 weeks	High School grads.
Radiology & X-ray	35	104 weeks	High School grads.
Hospital Adm.	1	24 weeks	College grads.
Practical Nurse	19	52 weeks	High School grads.
TOTAL	<u>351</u>		



### Small Industries With Some Training Programs

Twenty-seven companies are included in this category. Employment ranged from 59 to 2900.

Entrance age was 18 to 21.

Twelve required a High School education and seven required preparation above high school education.

Programs were financed by tuition and/or by the company itself; all for persons who were already employed by the company

Following is a list of the occupational programs offered:

<u>Training Area</u>	<u>Enrollment</u>	<u>Length of Program</u>	<u>Source of Students</u>
Real Estate	736	3,4, and 5 weeks	Unemployed adults
Income tax	250	8 weeks	Unemployed adults
Sales	1667	4 to 52 weeks	Employees for present jobs and higher jobs
Insurance	305	24 to 190 weeks	Employees and
Auto. Tech.	15	25 weeks	H. S. drop-outs
Rail carman	7	208 weeks	H. S. graduates
Machinist	47	13,208, and 312 weeks	H.S. grads & drop-outs
Bus driver	38	4 weeks	New employees
Electrical dealer	4	104 weeks	New employees
Cashier training	180	1 week	New employees
Store manager	53	8 and 208 weeks	Present employees
Meat cutter	20	130 weeks	New employees
Stock clerk	35	2 and 104 weeks	New employees
Waitress	20	1 week	New employees
Cook	2	12 weeks	New employees
Kennel grooms	16	2 weeks	H. S. grads and drop-outs
Tour coordinator	1	12 weeks	College student
Hotel desk clerk	1	12 weeks	College student
Management	77	32 and 156 weeks	Employees and college grads.
<b>TOTAL</b>	<b>3476</b>		

### Industries with Extensive Training Programs

Five large industries are included in this category. Employment in these industries ranged from 1144 to 5200. All programs offered are for their own employees.

Six of the programs offered required H. S. graduation, 14 required above H. S. graduation, and 23 had no educational requirements.

Eleven of the programs required previous experience.

All of the programs were financed by the company in which the program was offered.

Following is a list of the educational programs offered by the industries:

<u>Training Area</u>	<u>Enrollment</u>	<u>Length of Program</u>	<u>Source of Students</u>
Electronics	104	4 and 15 weeks	Employees: present and higher jobs
Engineering	52	2, 9, and 12 weeks	Employees: present and higher jobs
Secretarial	61	1 week	Employees: present and higher jobs
New Employee Orientation	74	1, 10, 16 weeks	Employees: present and higher jobs
Business Management and Supervisors	516	1, 10, 16, 36 weeks	Employees: present and higher jobs
Data Processing	115	8 and 10 weeks	Employees: present and higher jobs
Languages	22	24 weeks	Employees: present and higher jobs
Reporters	23	11 weeks	Employees: present and higher jobs
Printer (Apprentice)	Unknown	312 weeks	Employees: present and higher jobs
TOTAL	967		

**APPENDIX C**

**Survey of Participants**

**in the Emily Griffith Opportunity School Classes**

**May, 1968**

## GUIDELINES FOR INSTRUCTORS FOR OPPORTUNITY SCHOOL EDUCATIONAL PLANNING SURVEY

The Opportunity School Educational Planning Survey is designed to help the administration make decisions regarding future educational programs. Your assistance in insuring that each questionnaire is completed in full will be appreciated.

Please read each question to your class. After reading a question, have your class complete it. Encourage students to seek your assistance if they are not sure of the answer. This is especially critical for question No. 8 . . . . . In which high school district do you live? Since we are particularly interested in knowing the coverage within the city being afforded by Opportunity School, please help students answer this question as correctly as possible (If you are not sure, make a best estimate). You are being provided with a city map showing the nine high school districts.

If a student objects to completing any particular question, you should encourage him to do so but do not insist.

Before the students are given the questionnaire, you should emphasize the following points to them:

1. The purpose of the study is to improve the services provided by the Opportunity School to the citizens of Denver.
2. No identification is requested on the questionnaire.
3. The results will be used for research and planning purposes only.
4. Beginning on Monday morning, April 22, each instructor is to ask his or her students to complete the questionnaires. By the end of that week, we should have a completed questionnaire for each student who attended any class--day, evening, or community.
5. No student should fill out more than one questionnaire. This will entail a query at each class session by each teacher as to whether there is a student present who has not completed one of the questionnaires.
6. In item No. 4 of the questionnaire, consider any student who attends school for 15 hours or more per week as a full time student.
7. Completed questionnaires must be returned to your coordinator by the following Monday, April 29.

Additional forms may be obtained from your coordinator.

Your name \_\_\_\_\_

Location \_\_\_\_\_

Day \_\_\_\_\_ Hour \_\_\_\_\_

*This sheet should be filled in for each class and placed on top of completed questionnaires in each class.*

**EMILY GRIFFITH OPPORTUNITY SCHOOL  
EDUCATIONAL PLANNING SURVEY**

1. What is the name and number of this course? \_\_\_\_\_
2. What is your age? \_\_\_\_\_
3. What is your sex? \_\_\_\_\_ Male  
\_\_\_\_\_ Female
4. Are you a full time student? \_\_\_\_\_  
a part time student? \_\_\_\_\_
5. How many other courses are you taking at the Opportunity School? \_\_\_\_\_  
Name them: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
6. What is the highest grade in school you completed? \_\_\_\_\_  
(If you have passed the G.E.D. test, count as 12 years)
7. Did you attend high school in Denver? \_\_\_\_\_ Yes \_\_\_\_\_ No  
a. If the answer is yes, which high school did you last attend?  
(Check only one)  

(1) North _____	(6) Abraham Lincoln _____
(2) East _____	(7) George Washington _____
(3) South _____	(8) John F. Kennedy _____
(4) West _____	(9) Thomas Jefferson _____
(5) Manual _____	

  
b. If the answer is yes, in which year did you last attend? \_\_\_\_\_
8. In which high school district do you now live?  
(If you do not know your high school district, ask your instructor to assist you. He has a city map showing the boundaries of each high school.)  
(Check only one)  

(1) North _____	(6) Abraham Lincoln _____
(2) East _____	(7) George Washington _____
(3) South _____	(8) John F. Kennedy _____
(4) West _____	(9) Thomas Jefferson _____
(5) Manual _____	(10) Do not reside in Denver _____
9. What is your main reason for attending Opportunity School?  
(Check only one)  

(1) Get a job _____
(2) Job advancement _____
(3) High School diploma _____
(4) Improve reading, writing, arithmetic _____
(5) Become a more effective citizen _____
(6) Become a better family member _____
(7) Rehabilitation _____
10. To which of the following groups do you belong?  
a. Negro \_\_\_\_\_  
b. Spanish surname \_\_\_\_\_  
c. Caucasian \_\_\_\_\_  
d. Other \_\_\_\_\_